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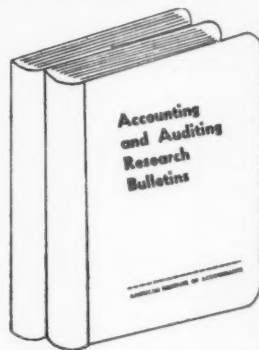
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JOHN B. PAYNE

**OCTOBER
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the Accounting Review

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The Accounting Review

Vol. XXIV

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No. 4

FINANCIAL AND ACCOUNTING ADMINISTRATION IN THE FEDERAL GOVERNMENT¹

H. W. BORDNER

IT IS BELIEVED that this discussion should be confined largely to the Departmental and Bureau level, because good administration must commence there and because the organization problem is most difficult at that level. This does not mean it is believed there is a good, adequate organization for financial and accounting administration at the top of the Federal Government. It is deplored that there has been inadequate central control; this can be attributed to the failure to create a single top accounting control agency. Some views on this subject are embodied in a paper, "Some Suggestions to the Commission on Organization of the Executive Branch of the Government."²

In order to have good financial and accounting administration in a Government department or bureau, or in a business enterprise, we need to concern ourselves with certain fundamentals. These, in order of their importance, are:

- (1) A good general conception of the role of financial and accounting administration in the entire management of the unit. Generally this conception has to do with the administrative problem of control over all operations and activities.
- (2) There must be general acceptance of this

conception and a will on the part of the entire management to use accounting tools for control purposes. Control must be exerted by operating executives, using accounting tools furnished them by accountants. This requires indoctrination of the entire organization.

- (3) There must be a good organizational plan, both for the entire unit and for the accounting department.
- (4) There must be good leadership and supervision of all financial and accounting activities, together with adequate training and discipline over the accounting organization.
- (5) Good techniques must be developed and adopted.

You will note that techniques are placed last. Yet without techniques you cannot have control.

An examination of these fundamentals is a prerequisite to any consideration of how we should organize for good financial and accounting administration. If we do not thoroughly understand what we must organize to accomplish, we cannot intelligently deal with how we should organize. Problems of organization must be approached pragmatically.

GENERAL CONCEPTION OF THE ROLE OF ACCOUNTING

I believe there has been a failure in public administration circles to recognize the role of accounting in public administra-

¹ This paper was presented at the November, 1948 meeting in Washington, D. C., of the Society for the Advancement of Management.

² ACCOUNTING REVIEW, October, 1948.

tion. This is probably only a matter of degree, because to some extent there is a similar weakness in business management circles. The whole field of accounting is one of the last management areas to be developed. Accountants bear a fair share of the blame for this lag. However, it is still believed that public administration is quite a way behind business in the development of the conception of the role of accounting in management control.

It would not be profitable to inquire too deeply into the reasons for this lag in Government, but it seems that there may be two reasons: (1) There has been no overwhelming, compulsive urge in Government, such as exists in competitive business, for economical administration with attention to control of costs; and (2) the patterns of public administration in the Federal Government are fixed very strongly by tradition and the straight-jacket of statute. In this connection we could learn much from the British.

In making this criticism it would be unfair and unreasonable to infer that improvement in financial and accounting administration has not taken place in the Federal Government in recent years, or that there are no hopes or possibilities for further improvement. Great progress has been made in budgetary control since 1921, and in the field of accounting and auditing of Government corporations since the passage of the George Act in 1945.

Not many years ago accounting was identified with the field of double-entry bookkeeping. In Government today it probably is still identified with appropriation and fund bookkeeping, which may generally be described by the familiar term of "fiscal accounting." Everybody in Government is familiar with the limitations of fiscal accounting. Many people, therefore, relegate it to a very inferior place in public administration. They consider too often that it is one of those necessary evils

saddled on a department to prevent the over-obligation or over-expenditure of appropriations made by the Congress, and to assure the legal and fiduciary integrity of handling financial transactions. True, certain reports must be rendered to the Bureau of the Budget, the Treasury, and the General Accounting Office; and the financial transactions must be handled in such a manner as will prevent criticism, but they see no vital need of this type of accounting for purposes of administrative control of operations.

There are signs in many agencies of dawning consciousness of a larger conception of the place of accounting in administrative control. The time is ripe for great progress in this area. There are many agencies who have recognized a need for a type of accounting that will aid the management in control over operating costs. This type of accounting in the Federal Government is generally referred to as "cost accounting," and the development of cost accounting recognizes the necessity of going beyond the requirements of fiscal accounting.

However, we can't get down to grips with this problem unless we understand the objectives or purposes of accounting from a management standpoint. Just how can it be used in administration?

In any business or other organization of human activity that is too large for one man to control individually, management requires data for purposes of control through planning, checking on performance, and taking corrective measures. Data or information must have a purpose; it must be useful to management in administration.

Management processes must start with a determination of operating policies and plans in the light of the fundamental mission of the enterprise, association, or activity. This must be followed by an organizational plan best aimed at carrying

out the over-all operating policies and plans. Such an organization requires the assignment of definite responsibilities and delegation of commensurate authority in a chain of authority or command. Organization experts refer to this as the scalar principle. And when we deal with responsibilities we deal also with accountabilities. Your Webster's dictionary defines responsibility as a state of being accountable.

You will all recognize the sound management doctrine, or principle, that the top executives in the organization cannot delegate responsibility—they can only delegate authority and assign specific, commensurate responsibility. Top management cannot discharge its responsibilities unless it demands accountability up the chain of command for the satisfactory performance of every link in the chain in accordance with assigned responsibilities. Therefore, it is a basic administrative necessity in a scalar organization that each element of management is accountable to its superior. This conception of accountability includes, but is necessarily much more extensive than, the ordinary Government conception of the custodian's accountability for funds or property held for the Government.

This theory of accountability, joined to responsibility, extends in turn from the head of a department or agency to the Chief Executive of the United States and to the Congress. Their responsibilities and accountabilities in turn run to all the citizens of the United States.

In order that any executive may be held fully accountable by his superior there must be a definite assignment of responsibilities. And this requires, in the process of all operational planning, that operating goals shall be set through a series of interrelated plans in terms of expected accomplishment and costs of accomplishment. Elements of such plan-

ning relate to a fiscal year, a month, or bridge over a period of years. An individual order or directive implements a part of a plan. When such goals are established it is necessary to continuously measure performance against the goals established, both in terms of accomplishment and costs, in order to assure attainment of the over-all objectives of the whole organization. This entire process of measuring performance against established goals for the use of management is the major role of accounting from a management standpoint.

Cost budgeting, while based upon basic operating plans, also may have a reverse effect upon those plans. When appraisal of the value of programs in the light of original estimated costs and accomplishments, or even in the light of availability of funds, indicates that any program should be eliminated or adjusted on a different scale, the basic operating plans will require revision.

This general explanation shows why accounting, from a management viewpoint, is identified with control. This is why the head of an accounting organization in business is generally referred to as a "controller."

Lest there be some fear that this conception of control means the controller must be considered to be responsible for the over-all administration instead of the chief operating executives, I will hasten to indicate the limitations of the functions of the chief accountant, or controller, and his staff. It is considered that the controller and his organization should provide the operating executives with the tools of control, and that it is up to the operating executives to really exercise the control through establishing basic plans, assigning responsibilities, and taking disciplinary measures and giving leadership and assistance to those in need of help in any way. The controller and his staff should

not make operating decisions, not only because they have dubious qualifications for such action, but also because organizational effectiveness requires that they refrain from interfering with the operating executives. The controller is a member of a functional team.

It is not the purpose here to deal extensively with the techniques of control but just to bring the subject down to earth it may be indicated that two of the principal types of techniques have to do with budgets and reports.

This paper is not addressed to techniques of accounting. Yet it should be stated that we have an adequate body of techniques developed today in either Government or business to meet all of the requirements in Government, although as time goes on we shall have better techniques available. These techniques must be applied and always adapted with discretion and judgment in view of operating needs and in consideration of economy of operation.

A budget represents the financial cost aspects of operating plans. However, a good budget should identify costs with the organizational unit's responsibility for given activities, and will take into consideration all of the requirements in manpower, equipment, supplies, and services that will be required physically to accomplish goals established. In addition to the budgeted costs, it would be desirable to establish the specific performance or accomplishments to be expected by each organizational unit, including time limitations. This generally describes the budgetary and planning process as being more mathematical than is usually the case in practice, and yet it sets forth the ideal to which the planning and accounting process should be directed. Certainly the budget from a management control viewpoint has great importance in addition to its requirement for the purpose of ob-

taining appropriations from the Congress.

Some people may raise an objection to the effect that an accountant has no place in management planning of this character. Yet is it believed that any really worthwhile plans must have the assistance of persons qualified to aid in working out the plan as far as possible in mathematical terms, both as to objectives and costs of attaining those objectives. The language of budgeting is the language of accounting. It is also important to recognize that goals must be established in this manner, if the persons charged with responsibility for carrying out segments of the plan are to be held accountable in a real sense.

It would be extremely difficult to prepare budgets of operating costs if cost experience data were not available or, in the absence of such data, with the aid of cost standards determined by cost accountants in cooperation with technically qualified personnel, such as engineers.

In the process of checking on performance the device of reporting is required. Necessarily, accounting reports showing performance and cost progress must be timely, as well as accurate, to be of any use to management in correcting difficulties or modifying plans where required.

We are now in a position to recognize the true place, from a management standpoint, of bookkeeping or cost-keeping, or the process of compiling statistics of performance—and that is that these are only the means for furnishing data through reports to operating executives at every level of management for the purpose of actual control of operations. Of course, we should not dismiss the values of the uses of bookkeeping as a means of making settlements with debtors and creditors, or for establishing fiduciary accountability for cash or property held by custodians. But from the broader standpoint, even these uses of accounting deal with the discharge of responsibilities by those accountable.

Based upon this broad conception of financial and accounting administration, or control as it is generally known in business, let us go on to deal with those related areas of accounting that are so much segregated or compartmentized in Government departments and agencies. Let us see how they are related in terms of the over-all management control objective, and why they should be integrated in one service organization having the control objective.

THE BUDGET OFFICE

The Budget and Accounting Act of 1921 established the Bureau of the Budget, independent of any other accounting organization in the Federal Government. It also required the establishment of a budget officer for every department and agency in the Executive Branch of the Government. This emphasis on budgeting undoubtedly has had a great deal of strength, but I believe it has been a weakness to disassociate the Bureau of the Budget from the general accounting agency of the Executive Branch of the Government. As a result the Bureau of the Budget has not had adequate tools to do its job. By this I mean that it has not had adequate control over accounting policy or reporting.

It should be recognized that the Bureau of the Budget has actually filled a greater need in the Executive Branch of the Government than the usual type of business control agency. The Bureau has actually been used as an operating management assistant to the Chief Executive of the United States. This is a tremendously important function, but one that should be identified with executive administration, which is something more than accounting control.

From a departmental standpoint, budget officers have not only been the chief advocates for, and representatives of, the department or agency with the Bureau

of the Budget and the Congress, but they have tended similarly to take on both the roles of operating executive and controller. It is believed to be a mistake for the top operating executives to allow this confusion of functions to exist. There should be a separation of these two functions in departments in a manner whereby management decisions are made by the operating executives, and the control organization acts merely as their assistant in translating their plans into figures and in giving back to them accounting or performance reports for their executive use. There should be no division of authority between operating executives and the control organization. It should be apparent that if the control organization is to satisfactorily serve all levels of management it must be established in an independent and objective position free from any of the friction and bad feelings that might be generated through their assuming to usurp the operating executive's prerogative.

This point of view is unorthodox in Government; yet its wisdom is quite generally accepted in business, and it is believed that if you who are in Government departments and agencies would thoroughly study this matter, you would agree eventually that an important principle is involved here. However, the need is recognized for development of a conception in operating executives of the use of accounting tools in control; there is no substitute for such a conception.

One further word on this subject—and that is that good operating executives, qualified to make basic management plans and decisions, are generally poorly qualified, from the technical viewpoint, to either establish or operate a good accounting organization, and furthermore their time is better occupied with operating matters.

This is not an attempt to subordinate

the place of planning, including the budgeting of costs, in the organization. It is merely trying to place the respective responsibilities where they may be most capably discharged from the standpoint of the department or agency as a whole. It would not for a minute be inferred that budgeting has been overdeveloped. On the contrary, it is believed there is great opportunity for further development, and that its techniques may be improved greatly if emphasis is directed more strongly towards dealing with estimated costs upon the basis of the functions and activities and organizational responsibilities of the department or agency, as well as its component units, supplemented by the establishment of accomplishment goals as well as costs.

I recently read a quotation stating that one of the greatest problems facing the Government, from the standpoint of administration, is the appraisal of Government functions and activities in the light of their accomplishments and costs as criteria for the basis of their continuance. This is a challenge to accounting and budgetary practice, as well as to public administration. No higher purpose of accounting control in public administration could be stated.

FISCAL ACCOUNTING

The term "fiscal accounting" is used to describe that type of accounting required by law for financial transactions under appropriations by the Congress. Because this type of accounting is generally familiar in the departments and throughout the Federal Government, it is fiscal accounting that comes to mind when the term "accounting" is mentioned, although actually this type of accounting, as presently conceived, only begins to cover the role of accounting in the departments.

The purposes and functions of fiscal accounting may be summarized as follows:

- (1) Prevention of the over-obligation or over-expenditure of appropriations made by the Congress. To that end bookkeeping is important in providing day-to-day information on the status of available balances to officials charged with responsibility for approving obligations and expenditures.
- (2) Safeguarding the fiduciary integrity of handling financial transactions of the department and preventing fraud and irregularities. In this connection, designated disbursing officers are made personally accountable for both the legality and fidelity of cash transactions.
- (3) Assurance that all cash disbursements are made with due observance of the restrictive statutes.
- (4) Making settlements with debtors and creditors pursuant to law, contractual or other arrangements. This includes the internal audit of vouchers, the preparation and audit of payrolls, making disbursements, and collecting such receipts as are due the department.

The proper discharge of departmental accountability for the use of appropriations is evidenced in two ways:

- (1) Rendition of monthly and annual reports, showing for each appropriation a comparison of the amounts appropriated, obligations incurred, disbursements, and remaining balances, both unobligated and undisbursed; and
- (2) Rendition of reports of cash transactions by the disbursing officers to the General Accounting Office, together with supporting documents, for the purpose of detailed auditing of cash transactions and balances of advances of funds for which the disbursing officers are accountable.

It is believed that fiscal accounting procedures are reasonably effective for the established objectives, but that these objectives are inadequate from the standpoint of accounting for management purposes. The system itself is cumbersome and not at all adaptable to management's accounting needs. Furthermore, the system does not recognize that accountability lies in the head of the department. The major difficulties in this connection stem directly from basic laws more than from

the procedures prescribed by the Comptroller General, who has only followed legal requirements. What is needed is a complete overhauling of existing laws and practices based upon a higher, modern conception of accounting.

The reports produced under this system are not informative for top-management purposes because the account classifications of appropriations and expenditures are not meaningful from an operating standpoint, and because the obligation basis of accounting is not directed towards an accounting for operating costs. Reports under this accounting system serve only to show the top management and outside agencies that the legal requirements of appropriation accounting have been complied with. The significance of this criticism will be made clearer when management's accounting needs are considered.

Probably the greatest criticism of this type of accounting lies in the emphasis it places on furnishing information continuously as to availability of authorized appropriations for obligation. When it is also considered that the period of availability of appropriations for obligation generally has a fixed expiration date, and that it is possible to use one year's appropriations for subsequent years' expenditures merely by creating legal obligations before the expiration date, it will be appreciated that there is an actual incentive to obligate all appropriation balances before they expire. This use of appropriations applies largely to procurement of material. "A bird in the hand is worth two in the bush" is a commonly observed axiom in the conduct of operations from a financial viewpoint under the present pattern of appropriation accounting.

COST ACCOUNTING

Recognizing the limitations of fiscal accounting, many departments and agencies have set up separate systems of cost

accounting. Unfortunately there have been occasions in the Federal Government departments and agencies where cost accounting has been entirely disassociated from fiscal accounting and budgeting. In such cases there has tended to be established a separate cost accounting agency under direct supervision of other management people. Perhaps in such instances this is an indictment of the caliber of fiscal accountants in those organizations.

When this segregation of cost accounting has taken place there has tended to be a limited objective, through the application of such an accounting system to only a segment of the operations of the department or through its use in cost control only at lower levels. Generally there has been no complete conception of the role of cost accounting in over-all control of programs or missions or complete control over the discharge of all assigned responsibilities. Sometimes the reliability of the costs established has not even been provided for by reconciliation with the fiscal accounts. Moreover, because the cost accounts are not on the same "wave length" as the fiscal accounts, the usefulness of cost data for budgetary purposes has been very limited. This is not entirely a problem that arises just because the fiscal and cost accounting systems are operated by different organizational units, but it is a problem that is basic due to the highly unsatisfactory character of fiscal accounting.

It should be recognized that the present system of fiscal accounting and budgeting needs a complete overhauling. The cost basis of accounting and adequate classifications of costs should be established as the single basis of all accounting in the Federal Government. This would result in both economy in operation through using only one accounting system and would also provide more intelligent comprehensible budgets and reports for the use of the

Congress and the Bureau of the Budget, as well as the departmental managements.

A need has been indicated for changing the basis of appropriation accounting from "obligations incurred" to costs. Moreover, it is necessary to classify both budgeted and actual costs by programs or missions, functions and the responsible organizational units for the purpose of aiding in:

- (1) Showing a discharge of responsibilities for costs.
- (2) Permitting appraisal by top management of the worth of missions or functions in the light of costs and accomplishments.

Corrective action might be required in either case through discipline, or by revision in plans or by other action.

There are some who may question the wisdom of allocation or assessment of costs against the beneficiary functions or organizational units because they believe it is much simpler to account for costs or expenditures by those organizational units responsible for obligation in the manner generally common in fiscal accounting. This is a basic defect of fiscal accounting that must be remedied if we are to have information as to program costs or any degree of control over those basically responsible for incurring the costs. As to control over costs, it is believed that it is necessary to charge the heads or organizational units responsible for incurring the costs in order to make them cost conscious.

PROPERTY AND INVENTORY ACCOUNTING

The fiscal accounting system does not generally provide for financial accounting for property and inventories. This is also one reason why cost accounting cannot be on the same basis as fiscal accounting.

Where inventories of supplies are carried by a department or agency in any considerable amount and the inventory levels fluctuate, it is impossible to know the cost of operations on the basis of supply purchases. It is necessary to deal with the cost

of supplies consumed, rather than those purchased from the standpoint of operating costs. Moreover, because it is desirable to know costs by organizational and activity units, it is essential to allocate supply costs according to the users, and that cannot be done on a purchase basis. Again, where inventories are of consequence it is desirable to control the increase in size of inventories and to account for losses due to obsolescence or otherwise. This cannot be done well without dollar accounting for inventories.

Again, from the standpoint of accountability for both permanent property and inventories, the use of dollar accounting provides a better mathematical means of establishing accountability of the custodians. Without the use of dollar control figures there is no general awareness of property and inventory losses, and it is difficult to be assured that there has been an adequate accounting.

From an organizational standpoint, when there is no dollar accounting for property and inventories and when there is no separate accounting for cost of supplies consumed, there has been a tendency to compartmentize accounting physically for property and inventories, usually under the direction of those responsible for procurement, storage, and issue. This results in a violation of the principle of internal control and tends to perpetuate the failure to integrate this type of accounting with fiscal and cost accounting.

When all accounting is established on a cost basis, a single-purpose system will include property and inventory accounting as well as cost accounting, budgeting and fiscal accounting.

From an operating standpoint, a good property and inventory accounting system must be of value in providing information for use in determination of requirements for procurement for storage, and for distribution, in a manner that will keep

stocks on hand and outstanding purchase commitments at a minimum and that will assure that the right material will be at the right place at the right time. In the National Military Establishment, these matters are considered to represent the special field of logistics which is a basic necessity in military operations.

REPORTS AND STATISTICS

We frequently find departments and agencies establishing a separate department for reports and statistics. Usually this can be attributed to the fact that management is not being provided with adequate data to operate the department or agency, usually because of the limitations of fiscal accounting. It should not be difficult to appreciate the fact that reports are only as good as the data upon which they are based. If there were an adequate, all-purpose accounting system, reporting as well as budgeting needs would be basic criteria behind the development of the system. Moreover, it would be recognized that reports of costs are inadequate without relation to budget estimates of costs and measurement of work to be done or performance, and this involves statistics. Statistics must be used in budgetary planning, and, in fact, statistics of the requirements of manpower, equipment, supplies, and services must precede the establishment of budgeted costs.

In the area of statistics, I would differentiate between the use of data in accounting or control over operations of the organization, from those statistics of purely general economic or social data that have no bearing upon internal administration. The latter field has no place in financial and accounting administration of a department or agency. It is an entirely separate field. But wherever administrative control involves the use of statistics, the statistical activity is just part of the total accounting control activity.

There are some who believe that the field of statistics is identified with control and some people have gone so far as to indicate that accounting is a subsidiary field to statistics, possibly because they held the narrow conception of accounting as being the equivalent of bookkeeping, and that bookkeeping provides a basis for many statistics. In my opinion, the viewpoint advocated here is not only borne out in business practice, but is also the sounder conception from an administrative and organizational point of view. The very derivation of the word "statistics" indicates no purpose or use thereof, whereas the derivation of the words "accounting" and "accountability" is extremely significant from an administrative or organizational point of view.

Reporting must be the basis of control action on the part of operating executives. Reports must be useful for this purpose to be of any value. This means that reports must be designed to be prepared for use at all management levels based upon individual accountabilities. If a reporting system is properly designed, reports at higher levels will be prepared by combinations or consolidations of lower level reports, thus avoiding duplicate bookkeeping. For management purposes, therefore, reporting and the related bookkeeping must be decentralized, but in accordance with principles and designs established centrally.

The responsibilities of top departmental management for reporting to the Chief Executive, to the Congress, and to the public should not be overlooked. It is even more important to develop this type of reporting than for business corporations to develop reporting to investors. That this type of reporting has been lacking in Government is generally known. Development of such reporting and more informative budgets should aid public administration at top levels; and incidentally it should aid in prevention of difficulties be-

tween the Executive and Legislative Branches of the Government.

GENERAL COMMENTS ON ORGANIZATION RELATIONSHIPS

In any department or agency of the Federal Government whose operations are divided between independent bureaus, or whose operations are complex and geographically extensive, it is usual to find a decentralized organization. The primary organization problem of such a department or agency is one of central control over policies, plans, and operating results, but decentralized authority and responsibility for segments of actual operations. This problem is no different than the problem of a large business enterprise, such as General Motors Corporation, with its many manufacturing divisions, each operated as a unit.

Based upon a conception of the accounting organization as a service organization to all elements of management, it is necessary to decentralize the organization for accounting operations to provide prompt, accurate service to the various divisions and to the several levels of management in each division. This means that disbursing, bookkeeping, and reporting and statistical operations must be decentralized. However, top management control must be served through the bringing together of budgets and reports at the top level. Accounting plans, policies, principles, and even reporting patterns must be established at top level in order to coordinate the decentralized accounting operations for top management control purposes. This does not require duplication at headquarters of bookkeeping or statistical operations performed in the field.

In order that the operating divisions will be adequately served, it is necessary that each one shall have its own controller under the administrative supervision of

the operating head of the division, but in order that there may be adequate functional or technical guidance or control over the divisional controllers by the departmental controller, it is desirable that the departmental controller shall approve the appointment of the divisional controllers and have power of their removal or promotion jointly with those operating executives responsible for the respective organizational units.

In promulgating policies, principles, and standards for guidance of the divisional controllers and their organizations, the use of accounting manuals prepared at headquarters is essential.

In order that adequate attention shall be given to policies, principles, and standards, it is desirable to have a central policies and procedures division. This division should be charged with the development of policies and procedures and the preparation of accounting manuals for general use. These functions would include the development of conceptions, principles and the accounting organization pattern, the design of budgets and reports, the development of classifications of accounts, the prescription of detailed procedures, and the development of both good techniques and their uses. However, this division should operate upon the principle that the needs of operating executives at every level should be met, and that any accounting system which does not serve management needs is not much good. It is especially desirable to centralize the policies and procedures function in a Federal Government department or agency in order to integrate all control functions, which, as we know, are so highly compartmentized. Without such centralization of policy functions there would continue to be the inevitable conflicts, inconsistencies, gaps, and overlapping of accounting functions and procedures throughout the organization.

Program analysis and interpretation

There appears to be a definite need in a controller's department for a separate division to analyze and interpret reports as a service to the operating executives who have the basic responsibility for undertaking action required by disclosures in these reports. The same function requires to be decentralized parallel with the accounting organization for decentralized management. There has been too much tendency on the part of accountants to merely furnish figures to operating executives without much thought of their significance. In any event, if reports are to be informative and meaningful, they must be the subject of regular analysis and interpretation. Furthermore, in addition to such analysis and interpretation to insure that worth-while reports are being given to operating executives, it would generally be necessary to give them some assistance in interpretation to insure that the reports are not misunderstood. A program of this type is especially vital in the developmental stages of the use of accounting for management purposes in order to assure that the operating executives understand accounting language, and that the controller's department understands the operating executives' language. In this connection there should be close coordination with the policy division.

Internal control and internal auditing

Another essential feature of this type of operation is the use of an internal audit agency attached to the office of the departmental controller, whose duty it should be to police the financial and accounting activities throughout the department.

Internal auditing is an area of accounting that has scarcely been conceived in the departments and agencies of the Federal Government except in some Government

corporations and similar independent establishments. It is true that there has been some development in the field of property auditing, auditing of costs reimbursable under contracts with outside industrial establishments, and auditing of certain non-appropriated funds where the General Accounting Office is not involved, but in the general area of internal auditing of fiscal and cost accounting there has been no activity. Probably the main reason for this lack of development of internal auditing is the general conception that the General Accounting Office is solely responsible for fiscal auditing, but this conception does not recognize the great value of internal auditing from a management standpoint, let alone the sole responsibility of the heads of the departments and agencies for prevention of irregularities and falsification of accounts.

Internal auditing is absolutely necessary as a method of policing financial and accounting activities throughout the departments or agencies. But perhaps one of the greatest benefits of internal auditing to the departments or agencies would lie in the detection of failures in specific spots to follow standard policies and procedures in every area of management, and in pointing the way for immediate correction. Internal auditing may also have its constructive value in making recommendations for accounting improvements that have not yet been provided or specified for general use. With the proper development of internal auditing also, supplementing internal control in the handling of all financial and property transactions, the need for comprehensive, detailed auditing by the General Accounting Office would be obviated, and that organization would be enabled to make over-all audits on a commercial basis adequate for the protection of the Government, and the assurance of the Congress that the departments and agencies are

doing a good job of accounting. But before this improvement can be made, the departments and agencies must put their houses in order.

I believe that it is not a proper objective of internal auditing to make complete, or even extensive, detailed audits of all transactions. That method of auditing is obsolete, not only from the standpoint of business, but also from the standpoint of Government. Whether it be conceived that auditing should be conducted exclusively by the General Accounting Office, or by both the General Accounting Office and the departments and agencies for different purposes, complete, or even extensive, auditing of transactions is uneconomical and wasteful. Moreover, it is unnecessary if there is an adequate system of *internal control* which will prevent fraud and irregularities—it is wisely said that an ounce of prevention is worth a pound of cure, and that it does no good to close the stable door after the horse is stolen. In this connection, it should be recognized that the gospel of perfection has no place in Government operations any more than in other human activities. Auditing and internal control should be developed in a manner that results justify the costs—there is such a thing as costs being in excess of the value of results. This is a general truth applicable to all accounting procedures. It is important to try to draw this line, but it is not easy to do it.

COMPARISON OF ACCOUNTING CONTROL IN GOVERNMENT AND BUSINESS ENTERPRISE

It is frequently said that accounting in Government must be essentially different from accounting in business, because their objectives are entirely different; that business is concerned primarily with profits; and that Government is concerned primarily with service. I believe it is wrong and superficial to accept this idea as being of controlling significance in comparing ac-

counting control in Government and business.

In business the control of profits is indirect. Profits are a result. Control must relate primarily to causes. There will be no profits in a competitive business unless there is control of operating costs and accomplishments, including output. In these respects the problem of control in industry is no different basically than in Government.

From the standpoint of control of profits in business, there must also be control over sales or revenues; this requires a number of special elements of control that do not exist in Government. It is not possible in a competitive business to establish selling prices based simply upon costs. Competitive prices must be considered, as well as the nature and extent of the demand for the product. In the first place, the product must be such as to have a given demand at a given price, but this requires that the product and its manufacturing processes be designed also with a view to both demand and cost considerations. This process may be considered to be analogous to the problem of cutting and fitting the budget of a Government department in terms of costs based upon a limitation of available funds. Control of sales and revenues also requires the establishment of quotas by products and by sales areas or organizational units.

However, when we come to the question of control over production and operating costs in industry, we have a problem that is much more analogous to the control over costs and work output or accomplishment by a Government department. From the standpoint of measurement of accomplishment, it may be concluded fairly that the problems of measurement of accomplishment in industry are generally much simpler than in Government. It is easier to measure such things as actual sales volume and production output, which are both

subjective and objective measures, so to speak, than it is to measure the intangible results of most Government service activities conducted from the standpoint of the National welfare. Subjective measurements of accomplishments in Government must often be used for lack of any better measurement to weigh against costs, but the result is not entirely satisfactory because such measurements have no necessary relation with program objectives.

Frequently, the question arises as to whether it is possible to control costs in Government activities, because there is no profit motive such as exists in business. It is not believed that this doubt is justified. In the case of business, the enterprise profit motive does not reach below the top echelon of management, although it may be concluded fairly that this profit motive gives the top management the necessary drive to enforce cost control down the line. From factory managers down, performance is measured in terms of cost and output without consideration of profit. There is, of course, extensive use of incentive methods of compensation in industry that are not available in the Government because of salary limitations, fixed salary and wage scales, and certain legal prohibitions against time-study—all of which are opposed to the Government's best interests.

There does remain one possible important incentive—recognition of managerial ability as one factor to be considered in promotions and assignment of positions within the department. This requires that proper steps be taken to instill cost consciousness in the rank and file of the departments. The Air Force is well aware of this method of attack on the problem, and has indicated it intends to proceed on that basis.

Altogether, I believe that there are many more points of similarity in accounting control problems of Government and business than are generally realized. The basic philosophy of management control by the use of accounting is exactly the same. The differences are largely in detailed procedures and methods, and in the emphasis or adaptation of basic principles to the specific objectives and purposes of the Government department or business enterprise. From the organizational point of view, I can see few differences, excepting organization for revenue accounting and tax accounting that are peculiar to business; however, these are only specific phases of business accounting that must be integrated in the controller's department. The necessity for integration of all accounting control functions is just as great in Government as in business.

SCIENCE AND ACCOUNTING

EDWARD G. NELSON

IN THE UNITED STATES during the first quarter of the twentieth century, accounting was a young and rapidly growing profession struggling to improve its adaptive behavior in an environment of mechanistic science. The intellectual descendants of Newton, John Locke, and the Scottish commonsense philosophers set the mental pattern of the society in which accountants worked, and the subject was approached as if the accounting universe was a closed, unchanging system that could be reduced to a few universal laws. Accountants appealed to science for authority and found employment in a search for principles that would place accounting on a high plane of orthodoxy in an economic world arranged by a natural order of things.

Arthur Lowes Dickinson, in the introduction to Dicksee's *Auditing*, professed to believe that "while differences of opinion on matters of principle must always exist, perhaps they exist to a less extent in accounting for the reason that most of its problems when attacked with intelligence admit of being carried back to elementary first principles."¹ Dickinson may have denied any scientific authority for his "first principles" had he been asked to do so; nevertheless the thought of complex accounting problems, when attacked with intelligence, being "carried back" suggests a closed system with few universal laws.

It would be interesting indeed, and perhaps enlightening, to trace the origin and development of accounting as a science; however for the present it is sufficient to note a widespread belief in "accounting science" throughout the country during

the early years of the century. Dickinson wrote of bookkeeping as a "simple science" to be mastered without a high order of intelligence or education.² William Morse Cole defined his subject as "scientific analysis and record of business transactions," and the definition was unchanged in the revised and enlarged edition.³ If Cole's definition was intended merely to disclose a pattern of thought widely accepted by writers in the field of accounting, there is ample evidence of his familiarity with the literature. Other accountants, with equal standing among their contemporaries, told their readers that they were using the word *accounting* in similar fashion.

In 1910 a LaSalle Extension University publication reported that "accounting is a science which aims at systematic presentation of business facts and whose rules are designed to indicate or state the principles upon which such a record of business facts must be made."⁴ A year later Henry C. Bentley emphasized the "must" by offering the world *The Science of Accounts*, a treatise which presented "the underlying principles of modern accounting."⁵ The suggestion was there. The accounting universe was closed, and could be reduced to "underlying principles."

Kester was one of the first to reveal the existence of differences concerning the mechanistic hypothesis. He affirmed his belief in accounting science, however. "As to whether accounting is an art or a science, he (the author) believes there is an art and also a science of accounting, the former resting upon the principles estab-

¹ *Ibid.*, p. 11.

² *Accounts, Their Construction and Interpretation*, 1908, 1915, p. 4.

³ *Business Administration, Theory, Practice and Application*, Walter D. Moody, ed., p. 3.

⁴ New York, The Ronald Press Company, 1911.

⁵ Lawrence R. Dicksee, *Auditing*, 2nd American ed., R. H. Montgomery, ed., 1905, p. 13.

lished by the latter."⁶ The "closed universe" was not denied, or if it was, Kester subsequently changed his mind. In 1930, he found good reasons for revising his text while he assured his readers that "the basis on which those (accounting) principles rest does not change."⁷

Paton and Stevenson gave attention to the development of principles in contrast to specific accounting methods and office practice.⁸ The bright days of the golden 1920's found accounting with definite direction toward an acceptable goal. Hatfield wrote of the "science of accounting" in a formative stage, and warned against the foolhardiness of attempting categorical treatment of the subject.⁹ More than a decade later Rosenkamppff and Wider found less reason for caution. They looked upon the results of their work as "scientifically prepared statements," and exhibited for study by college students a theory and technique "referred to, collectively, as the science of accounting."¹⁰

An interest in and an appeal to science did not set accountants apart from those who worked in other specialized fields of knowledge. Fearing the adjective distorted the fact, historians were critical of Parkman, Prescott and others. Led by men like A. B. Hart, they emphasized the "strictly scientific" character of their study. Economists were scientific; political science, sociology, and the law did not escape the wave that was shaping the future.

Accounting belonged to this conventional society. The boundaries of its science were not delineated, and its relation to the other sciences, and to the arts, was not clear. But the preoccupation had pur-

pose. Accountants, as others at an earlier time and perhaps as others will, were attempting to free their discipline from the contingencies of time and space. They were searching for absolutes, and they were giving the profession status.

Concepts of "scientific accounting" were colored with centuries of scientific thought, and in the words Veblen used to characterize the physiocratic belief in natural rights, "a guiding norm that found ready assimilation into the common-sense views of (the) time."¹¹ Bertrand Russell has said: "The period of history which is commonly called 'modern' has a mental outlook which differs from that of the medieval period in many ways. Of these, two are the most important: the diminishing authority of the Church and the increasing authority of science."¹² The late Alfred North Whitehead also found a "new mentality" which has "altered the metaphysical presuppositions and the imaginative content of our minds," and he described the orientation as a union of "devotion to abstract generalization" with a "vehement and passionate interest in the relation of general principles to irreducible and stubborn facts."¹³

Science requires an instinctive faith in an "order of things." Is it not to be expected that many modern accountants, living in a scientific age, would search for authority with a faith in "nature," and with a desire to subdue the discipline with "irreducible and stubborn facts"? "Man," John Dewey declared, "is *naturally* a being that lives in association with others in a community possessing language and therefore enjoying a transmitted culture."¹⁴ Is it not to be expected that a desire for "sci-

⁶ Roy B. Kester, *Accounting Theory and Practice*, 1917, p. v.

⁷ *Ibid.*, v. I, 3rd ed., 1930, p. v.

⁸ W. A. Paton and R. A. Stevenson, *Principles of Accounting*, 1918, p. v.

⁹ Henry Rand Hatfield, *Accounting—Its Principles and Problems*, 1927, p. viii.

¹⁰ A. H. Rosenkamppff and William Wider, *Theory of Accounts*, 1942, pp. 3-4.

¹¹ Thorstein Veblen, "The Preconceptions of Economic Science; I," reprinted in *The Place of Science in Modern Civilization*, p. 95.

¹² *A History of Western Philosophy*, p. 159; cf., A. N. Whitehead, *Science and the Modern World*, p. ix.

¹³ *Ibid.*, pp. 3-4.

¹⁴ *Logic, The Theory of Inquiry*, p. 19.

entific accounting" would be culturally acquired?

The disposition to find a science of accounting can best be understood when placed in what Russell calls the "imaginative background" or in Santayana's "animal faith."¹⁵ Veblen believed the canons of knowledge to be in the nature of "habits of thought," and, he continued, "habit does not break with the past nor do the hereditary aptitudes that find expression in habit vary gratuitously with the mere lapse of time."¹⁶ As Russell noted, the purely mechanical view seldom suggested itself to the Greeks because mechanics played such a small part in the drama of Greek life. In contrast, "now-a-days a boy begins with mechanics which, by its very nature, suggests machines."¹⁷ The mechanical view has become a "habit" of modern thought. Is it not to be expected that, in a society enjoying a transmitted culture, many modern accountants would approach their subject as if it were a mechanical science; and that they would continue to do so until, as Veblen observed, "the exigencies of a later, altered situation enforce a variation from the norms and canons of the past, and so give rise to a modification of the habits of thought that decide what is, for the time, right in human conduct."¹⁸

Accounting, with its roots in the culture, has grown in an environment of methodical and unconscious selection. Professor Littleton traced the development of the species in his *Accounting Evolution to 1900*.¹⁹ Henry Rand Hatfield told of its romantic period in his delightful essay, *An Historical Defense of Bookkeeping*.²⁰ Was it Professor Ripley in his startling work,

*Main Street and Wall Street*²¹ that recently revealed "the exigencies of a later, altered situation" which enforced "a variation from the norms and canons of the past"? The charge against those who prepared accounts for public use, or who failed to do so, was supported with a mountain of evidence, and the plea for full disclosure was presented with telling force.

George O. May believes that accounting was interacting with the processes of the adaptive society in which it lives. Writing from the high view of time, he recalled for critics that during the twenty years following the famous report of the United States Steel Corporation for the year ending December 31, 1902, with notable exceptions, "corporations whose securities were listed on the public market tended to give more and more information to the stockholders and the public."²² Disclosure, he continued, increased in volume, and judged by the highest standards of other markets in all parts of the world, it was "reasonably satisfactory."

A word of caution is no doubt needed when the history of accounting is reviewed, and May's comment may be particularly important in these days when changing price levels have again raised questions concerning the direction of adaptation. But is it enough to know that, judged by the standards of other markets, American accounting during the 1920's was "reasonably satisfactory"? Is it not more important to know that accountants were adapting themselves to, or were prepared to adapt to, the demands of the changing society in which they lived?

Littleton was aware of the problem. In his *Accounting Evolution to 1900* he wrote: "Accounting is relative and progressive. The phenomena which form its subject matter are constantly changing. Older methods become less effective under al-

¹⁵ Bertrand Russell, *op. cit.*, p. 203; George Santayana, *Realms of Being*, p. 195.

¹⁶ "The Preoccupations of Economic Science, III," *op. cit.*, pp. 148-149.

¹⁷ *Op. cit.*, pp. 203-204.

¹⁸ *Op. cit.*, p. 149.

¹⁹ New York, American Institute Publishing Company, 1933.

²⁰ *Journal of Accountancy*, v. XXXVII, p. 241.

²¹ Boston: Little, Brown and Company, 1927.

²² *Financial Accounting*, 1943, p. 54.

tered conditions; earlier ideas become irrelevant in the face of new problems."²³ May believed that accounting "rules may, and sometimes must be, changed as conditions change."²⁴ And Montgomery emphasized the adaptive nature of accounting when he declared: "... by its very nature accounting adapts itself to business procedure, not business to accounting procedures."²⁵

These attitudes were developed in the face of a "later, altered situation," and the process of adaptation, as in other disciplines, was slow and painful. The Committee on Stock List of the New York Stock Exchange conducted what May called a "persistent and effective" campaign to raise the accounting standards of the corporation it could call into play.²⁶ But the idea that there was little truth in accounting gained such currency as the sun set on the 1920's that, when subsequent events proved disastrous to investors, a Congress, perhaps already convinced, was easily induced to grant authority over much financial accounting to a governmental agency.

The fall from grace during the 1930's was not accompanied by an immediate about-face. The culture defined the goals of accountants in terms of a mechanistic science, and many found it impossible to abandon their appeal to "nature." In 1939 Kester wrote of "currently basic, well-settled and undisputed principles."²⁷ Hatfield subscribed to a statement which said accounting is a science, although he was quick to add "in the sense that it provides a systematic treatment and classification for the transactions and conditions which must be recorded."²⁸ The deriva-

tions or sentiments of a mechanical age still linger. The 1947 edition of McFarland and Ayars text, *Accounting Fundamentals*, says accounting is a science and art.²⁹

The longing to be "scientific" may be partly a matter of prestige and partly a matter of honor.³⁰ In Russell's "modern times" a scientist has status, and to individual accountants, a science of accounting emphasizes differences in the abilities of persons, the importance of accounting, difficulties of the work, the place of accounting in the social organization, and the integrity of the individual.³¹ A science of accounting has a function in a society where science has status; it helps to satisfy the needs of many individuals; it is an incentive to important, useful work; and it helps to develop individual responsibility to society.³²

But status systems are also disruptive. They tend to distort the evaluation of individuals; they inhibit leadership and morale; and they limit adaptability in an adaptive society.³³ A science of accounting is in grave danger of becoming a middle-class ritual—a ritual in which the participants fail to analyze the facts, to reason from them, and to develop insight and inventiveness.

Byrne's plea for accounting "principles" and a clear distinction between "that body of fundamental truths underlying the philosophy of accounts . . . and the larger body of accounting rules, practices, and conventions . . ." ³⁴ no doubt aroused strong sentiments associated with the end-

²³ H. R. Hatfield, T. H. Sanders, and N. L. Burton, *Accounting-Principles and Practices*, 1940, p. 3.

²⁴ McGraw-Hill Book Company, Inc., p. 1.

²⁵ Cf., Morris R. Cohen, *A Preface to Logic*, p. 159; George O. May, *op. cit.*, p. 37; Maurice E. Peloubet, "Art or Science," *ACCOUNTING REVIEW*, v. XX, p. 394.

²⁶ Cf., Chester I. Barnard, "Status Systems," *Organization and Management*, p. 213.

²⁷ Cf., *ibid.*, pp. 228-229.

²⁸ Cf., *ibid.*, p. 323.

²⁹ Gilbert R. Byrne, "To What Extent Can Accounting Be Reduced to Rules and Standards?" *Journal of Accountancy*, v. LXIV, p. 368.

³⁰ p. 361.

³¹ "The Nature of Accounting," *Twenty-five Years of Accounting Responsibility*, pt. VI, pp. 306-307.

³² Robert H. Montgomery in the Foreword to Edward Peragallo's *Origin and Evolution of Double Entry Bookkeeping*.

³³ *Financial Accounting*, p. 55.

³⁴ *Principles of Accounting* 4th ed., p. vi.

less search for absolutes. Is the status of accounting not assured when the search for "principles" rests upon the divine authority of "fundamental truths"? The precise appearance of summary statements suggests the certainty and definiteness of mathematical physics. Individuals can satisfy their need for security with the manifest content of their work, and they can fulfill the frequently encountered emotional desire to deal with a "real" instead of an abstract world. Resistance to the attitudes expressed by the American Accounting Association and committees of the American Institute of Accountants³⁶ is strongly entrenched in sentiment. Is it any wonder that Carman found reason to write: "Accounting thought has lain dormant for generations at a time, arousing itself sluggishly for self-improvement only after it has been kicked awake."³⁶

That some accountants were "kicked awake" by the stirring events of the 1930's is suggested by the vigorous campaign to break from the encircling bounds of a mechanistic science and to find a new basis for accounting authority. Montgomery pleaded for adaptation. "So-called good accounting principles . . . are based on conventions and expediency," he wrote. "Don't let's call them accounting principles. A more accurate and honest term is good accounting practice."³⁷ Writing with a faith in the doctrine that accounting is a service institution—a tool of business—May contended that Byrne had selected the wrong meaning of the word *principles*.³⁸ An accounting "principle," he insisted with reference to the second listing in the Oxford English Dictionary, is:

A general law or rule adopted or professed as a

guide to action; a settled ground or basis of conduct or practice.

Kester changed his view and professed belief in a dynamic accounting without fixed and final principles.³⁹ The American Institute's Committee on Terminology explained: "Initially accounting rules are mere postulates derived from experience and reason. Only after they have proved useful, and become generally accepted, do they become principles of accounting."⁴⁰

The search for a new accounting authority seems to be gaining ground despite the strength of a lingering sentiment attached to a mechanistic science. It is interesting to note that gains appeared at a time when the accounting associations were prepared to assume some of the functions formerly fulfilled by an obscure, limited science. Accounting associations and institutes are now concerned with status, and emphasis upon differences in the abilities of persons, the importance of accounting, and the difficulties of accounting work are accented by an increasing selectivity among members and by a growing movement to license and differentiate accountants. Important questions nevertheless remain. What assures the "truth" of accounting principles? Are the ranges of accounting "truths" and "principles" co-responsive? What sorts of "truths" are there?

Organizations attempting to fulfill functions formerly performed by an instinctive faith in science should be prepared to be the object of aggression. Accounting associations can provide and are providing leadership in a period of change. They can supply and are supplying members of the profession with information about accounting; they can clarify and are clarifying obscure and ambiguous methods, techniques, and generalizations; and they can

³⁶ See *Accounting Research Bulletin No. 1*, pp. 1-2.

³⁷ Lewis A. Carman, "Primary Accounting Concepts," *Journal of Accountancy*, v. LXI, p. 348.

³⁸ R. H. Montgomery, "Dealings in Treasury Stock," *Journal of Accountancy*, v. LXV, pp. 478-479.

³⁹ George O. May, "Principles of Accounting," *Journal of Accountancy*, v. LXIV, p. 423.

⁴⁰ Roy B. Kester, "Sources of Accounting Principles," *Journal of Accountancy*, v. LXXIX, p. 531.

⁴¹ *Research Bulletin No. 7* (Special), p. 60; George O. May, *Financial Accounting*, p. 38.

summarize and are summarizing from time to time the extent of understanding. But those who supply information, clarify the ambiguous, and summarize the extent of understanding are likely to run counter to the derivations of an earlier age. Acceptance will require the individual accountant to lose the comfort and security of a well-entrenched sentiment, and he will often fight and organize to avoid the necessity of change.

The individual accountant, as others, has not always adapted himself readily to changes in the accounting society, and many find themselves greatly disturbed when they fail to understand their own relation to the profession and to the society in which accounting lives. There is comfort in the ritual of a mechanistic science, and there are individuals who seek personal satisfactions resulting from the manifest resemblance of accounting and mathematical physics. Individuals struggle to retain their personal comforts. Leaders in a movement for change may expect to be the focal point of an attack which, adorned in the dazzling dress of an apparent logic, is, in reality, an individual release of tension

and a fight to maintain personal equilibrium during the process of methodical selection.

The brunt of the onslaught can best be borne by an organization or organizations. Is it not therefore a function of accounting associations and institutes to receive aggression from those who are seeking relief from a conflict of personal belief and a socially accepted code? Is it not a function of accounting associations to provide a means whereby individuals caught in conflict situations may identify themselves with leaders in a movement for change? If the history of science in American accounting has been properly interpreted, it may be concluded that the exigencies of a "later, altered situation" with which accounting has been confronted since 1930 thrust upon the organizations the necessity of assuming a parent role. The choice can now be made by association leaders. Will they assist in the creation of an autocratic, democratic, or laissez-faire accounting society? The making of the choice should be guided by educational considerations. In what kind of social climate will a fruitful accounting grow?

CONTEMPORARY THEORIES OF CORPORATE PROFITS REPORTING

D. H. MACKENZIE

EVERY LONG and substantial rise in prices brings with it many problems and many suggestions of economic reform. After World War I there was a strong movement for the stabilization of the dollar. The fluctuating dollar was the culprit, and legislation was proposed to stabilize prices by varying the gold content of the dollar. Prominent economists lined up on opposing sides and testified before Congressional committees. Some argued that the proposed legislation would not accomplish what it was supposed to, and would likely create even greater problems. The proponents of the legislation failed to convince Congress that it should be passed, and since the death of Irving Fisher the movement to stabilize the dollar seems to be dormant. At least we have heard very little about it in recent years.

Since World War II accounting seems to be the chief culprit, and many stimulating articles have been written to this effect. Accounting is said to contribute to price inflation in two ways: (1) by providing misleading information upon which wage demands are based, and (2) by creating false optimism on the part of business men. Accountants are told that they are not accounting for economic value, for real profits (profits in terms of actual goods), or for current costs. To these latter charges the accountant must plead guilty; he does not account for economic value, for real profits, or for current costs. However, this criticism does not provide a case against present accounting methods. Any art or science can be criticized for what it does not do. If medicine were judged by its failures we would not have much respect for it. The achievements of an art or science may be much more important than its failures.

Before we adopt any changes in our basic theory, evidence must be provided that these changes will result in a better overall job than is now being done by accounting.

One of the most recent criticisms of conventional accounting methods that has come to this writer's attention is that of Roy A. Foulke in his pamphlet, *A Study of the Corporate Theory of Profits*.¹ Mr. Foulke believes that accounting should account for economic values and for real profits. He commends Kenneth MacNeal for advocating the use of economic values and the appraisal of fixed assets each year to determine their economic value. In discussing accounting, Mr. Foulke states: "... each individual item of fixed assets is not appraised separately each year although in *Truth in Accounting* Kenneth MacNeal advocates just such a policy." Since Mr. MacNeal's method represents one extreme viewpoint we shall briefly consider his idea of profits.

The use of the term "economic value" in *Truth in Accounting* has confused many people who have not had much training in economic theory. They seem to think that the economists have discovered some mysterious type of value with which most people are unfamiliar. Actually all the economist has done is confine much of his work to what he calls exchange value, or market value. He would not think of claiming that he had found an all-purpose measure of value or method of practicing valuation. Many years ago Lionel Edie said:

Valuation should be considered as a relative

¹ Foulke, Roy A., *A Study of the Corporate Theory of Profits* (Dun and Bradstreet, 1949.)

term, that is relative to some specific purpose. If the purpose is rate-making for public utilities, valuation involves a peculiar technique. . . . If the purpose is making accounting records of a concern, valuation proceeds upon certain distinctive lines for that one purpose. . . . Value as such has little meaning. Value for a purpose alone has meaning.²

This viewpoint is still almost universally held in economics. There is no all-purpose measure of value, and the economist knows of many types of value and valuation in addition to market value. He simply devotes much of his effort to the study of market values. MacNeal recognizes that the term "economic value" is synonymous with market value when he states: ". . . the economic value of a thing is its market price and that alone."³ MacNeal's thesis may therefore be reduced to the following: Accountants should account for market values. MacNeal would use market values on the balance sheet, if obtainable, for all assets except cash and receivables. When market values are not obtainable he would use what he considers the best substitute, the cost of replacement, and when this is not available he would use original cost. Each year, the increases and decreases in these values would be included in the profit and loss statement, and MacNeal states that he would not emphasize any distinction between realized and unrealized profits.⁴ MacNeal's depreciation would be computed on the market value or cost of replacement of fixed assets. However, he would also show unrealized capital gains on fixed assets on the profit and loss statement, and the capital gain might be greater than the depreciation, with the result that, instead of a deduction for de-

preciation, the net result in any year might be a gain. Since MacNeal would show land and inventories at market, and buildings and equipment at replacement costs, profits would in a period of rising prices, as in the past decade, be much higher than those actually reported by most companies.

Accountants could compile the type of profit and loss statement that MacNeal advocates. They could prepare balance sheets on which assets are shown at market values, replacement costs, and original costs. To do this they would have to rely on competent appraisers to provide the estimated cost of replacing plant and equipment (and this could be extremely costly). But who wants such statements? Who wants land shown on the balance sheet at market value when the land has a building upon it which could add to the sales value of the land or completely nullify it? Who is interested in the cost of replacing buildings and equipment that are not going to be replaced in the near future, and which, if sold, either piece-meal or as an entire unit, would bring amounts very different from replacement cost? If any such information is important, as it might be if the decision were close as to whether the business should operate or sell out, accountants can show this in collateral notations.

Since MacNeal's profit and loss statement shows all changes in balance sheet values, it is very different from one obtained by the purchasing power of the dollar method or the current cost method. In a period of rising prices and costs, it would show extremely high profits, with the opposite effect on profits from that which the purchasing power of the dollar or current cost methods would have. Obviously, in a period such as the last decade Mr. MacNeal's method would have few supporters, certainly none from the groups who are now advocating reform. Consequently, we

² Edie, L., *Economics, Principles and Problems* (Thomas Y. Crowell, 1926), p. 166.

³ MacNeal, Kenneth, *Truth in Accounting*, University of Pennsylvania Press, 1939, p. 88.

⁴ "No profit and loss statement, however, should stress a distinction between realized and unrealized profits. . . ." MacNeal, *ibid.*, p. 300.

may dismiss it from further consideration at present.

At the other extreme is the only adequate method yet suggested for reporting real income, that presented by Sweeney in his book *Stabilized Accounting*. Sweeney would, through the use of index numbers, convert balance sheet and profit and loss items in order to correct for changes in the purchasing power of the dollar. The purchasing power of the dollar decreases as prices increase, and vice versa. In periods of rising prices, cash and receivables lose in purchasing power. Cash of \$10,000 would after a price rise, have less purchasing power than before. It represents fewer dollars in terms of real things. On the other hand, in such a period, gains may be made on liabilities. Fewer real dollars will be required to liquidate a liability. For example, the liquidation in a period of high prices of a liability incurred during a period of low prices would result in a gain in purchasing power. Liabilities incurred in periods of low prices and still on the books in a period of high prices represent in part an unrealized gain.

Mr. Sweeney did an excellent job in his fine book. However, despite the revived interest in his method, this writer believes that as a general method of reporting profits it is of academic interest only. To be of general applicability the method would necessitate legislation to require all companies to use a common base year for their conversions. In addition the method is subject to other objections: (1) index numbers are not accurate, (2) the nature of the purchasing power to be measured is very intangible, (3) the information so provided would be of little use to anyone.

Index numbers are inaccurate as measuring devices; their greatest value is in showing trends. The possibility of considerable error in them is so great that at the turn of this century the noted Dutch economist, Pearson, advocated the discon-

tinuance of their use. The same possibilities of error still exist. We have the problem of determining the base year or years to use, of determining what items should be included in the index number, and of determining the weights to give these items. Finally, the averaging process with its weaknesses enters into their computation; for example, if an index number contains the prices of both leather and flax, these prices might fluctuate in opposite directions with no change in the index number.

Purchasing power is extremely difficult to measure. It varies with different people as evidenced from the following quotation from the late J. M. Keynes:

It follows that the purchasing power of money must always be defined with reference to a particular set of individuals in a given situation, namely those whose actual consumption furnishes us with our standard, and has no meaning unless the reference has been given.⁵

Applied to an individual company, this means that the measure of purchasing power, to have meaning, must be defined with reference to that company or industry and that locality. The purchasing power of a company's cash is determined by what that cash is to be spent for. If it is to be spent for rubber the purchasing power might be very different from what it would be if it were spent for flax. From 1914 to 1920 the price of rubber decreased slightly, whereas the price of flax increased enormously. From 1940 to 1945 the prices of agricultural products increased much more rapidly than the prices of non-agricultural products. Sweeney would use a composite index number made up of wholesale and retail commodity prices, security prices, farm prices, real estate values, and wages. Such a general index number would be of little use to business firms in computing their profits in terms of

⁵ Keynes, J. M., *A Treatise on Money*, Vol. I (New York: Harcourt, Brace and Company), p. 54.

real income. Business firms are different from one another just as people are. The Bureau of Labor Statistics found it necessary to study family budgets to determine what people actually spent money for, before it could arrive at a cost of living index number which had meaning; and this index number is none too accurate under certain conditions. A business firm would have to do likewise. It would have to construct its own index numbers in which proper weights would be given to the items for which money was to be spent, and in which local variations in prices, wages, etc., would be included. Considering the errors inherent in index numbers and the errors in judgment that would enter into the construction of one's own index numbers, we might reasonably argue that the reported profits would be pretty much what we would make them.

Finally, we may ask, who would want such statements? This writer doubts that business men, labor, investors, or the government would find them useful or acceptable. If business men need such statements we can prepare them, subject of course to the inaccuracies involved and the difficulties in measuring purchasing power. Business men would have little interest in them unless they thought they could be used for income tax purposes or in wage negotiations.

In periods of rising prices, profits determined by the purchasing power of the dollar method would ordinarily be lower than those reported under conventional methods, and for this reason we now find considerable interest in the method. However, there is little likelihood that the government would ever accept such a method for tax purposes. Moreover if one part of the economy reported income in this way for tax purposes, wage earners and others would probably demand the same privilege for their dollar has also changed. Consequently, for tax purposes we would be right

back where we started.

The chief reform in accounting conventions now being advocated is that of basing depreciation upon replacement cost rather than upon original cost. Some index number would probably be used in making such computations. The argument is advanced that with LIFO used for inventories all the important costs other than depreciation are on a current basis, therefore we should change our basis of depreciation. It is of course recognized that, in the case of LIFO, actual outlays have been made whereas in the case of depreciation based on replacement costs this is not so. Mr. Foulkes goes so far as to suggest that for depreciation we might use, as the basis, original cost or replacement cost whichever is the higher⁶ to get results similar to those obtained from cost or market, whichever is the lower for inventories. Although the cases are not analogous we can expect such reasoning as long as we follow an illogical convention such as cost or market, whichever is lower.

Accountants advocating reform have generally discarded, because of its vulnerability, the argument that the depreciation provisions should provide for the replacement of plant and equipment. Since the counter arguments are so well known, we shall just briefly mention them here: that if replacement cost is important, it is the cost of replacing the equivalent service and not the same physical equipment that should be considered; that since most of the replacements will not be made until many years have elapsed, we do not know what the cost will be; that replacement is not a function of depreciation but of entire revenue and of investors' decisions. Professor Willard Graham has introduced a variation of the replacement cost argument.⁷ He states that firms are making

⁶ Foulkes, Roy A., *ibid.*, p. 35-36.

⁷ Graham, W. J., "The Effect of Changing Price Levels Upon the Determination, Reporting, and In-

"equivalent replacements" each period, that some of the funds provided by profits are being used each period to replace a machine here, another there, etc. This is undoubtedly true, but this writer would still argue that such replacements should be charged against the revenue they help to produce for two reasons: (1) the replacements are almost always different from the equipment replaced, and (2) this method is not consistent with the way management decisions are made.

The replacement will almost always be different from the equipment replaced, frequently incorporating improvements which will result in lower labor costs, lower costs of repair, greater productivity, additional services, or some combination of these. In fact the replacement may permit the reorganization of the entire process and consequent lower costs.

If a machine is replaced with one that reduces the direct labor costs, or increases productivity, it would hardly seem reasonable to base depreciation on the cost of this new machine before it has been purchased. The replacement may result in much different services than those rendered by the old machine. The same is true of buildings. The new building usually is a much more efficient structure than the old one. The replacement may cost more, but it usually results in more services being obtained than before. It would seem only logical to claim that the net cost of this new machine should be charged to the revenues of the periods in which the machine is used. At least we must admit that a replacement involves much more than simply the replacement of a machine or building.

Depreciation based upon replacement costs is not consistent with the way in which depreciation enters into management decisions. Depreciation on existing plant and equipment assumes importance

in few, if any, management decisions. Such depreciation is a "sunk cost" that we cannot do much about once it is incurred. It enters into management decisions when replacements or additions are contemplated. There are of course some replacements over which management has little control. They must be made regardless of the cost, but in most instances management has some room in which to exercise its judgment as to the kind of replacement to be made. Particularly in the case of additions, management will attempt to estimate the revenues the additions will bring, and will deduct the costs, including the depreciation, from the revenues to estimate whether or not the proposal will be profitable. In other words, management relates such depreciation to the revenue it expects the additions to produce. Ordinarily management will not make the expenditure unless it foresees a profit from it. Consequently, it would seem that management's judgment, as reflected in these costs, should be checked upon by matching the costs with the revenues they help to produce. If management has made additions in periods of low costs, and then prices increase, it would seem that the results should be shown as more dollars of profit. Since the dollars are actually smaller than before, more of them should be earned and shown on the profit and loss statement. Or, if the management makes additions in periods of high prices, and prices drop, it would seem rather imprudent to lower the depreciation charge and enable management to show a profit. Such results may ensue if depreciation is based on replacement costs.

We cannot justify the current cost method on the basis that it accounts for real income, or economic sacrifices, for it does not. It goes only part way. The logic of such reasoning would require that we estimate all economic gains and sacrifices, and this would involve purchasing power

terpretation of Income," *THE ACCOUNTING REVIEW*, January, 1949, pp. 15-26.

accounting. However, we could proceed from the premise that current costs should be matched with revenues. It would be logical to do so if we could prove that better service would be so rendered by accounting. The test really is: "Would it work?"

This writer does not believe that any evidence has yet been advanced, or will be, to the effect that depreciation based on replacement cost would enable accounting to do a better job than is now being done. It is said that accounting fails management, that it is not providing management with the proper information. Such arguments as related to depreciation are erroneous. Management decisions are not affected by the depreciation shown on the profit and loss statement. Such depreciation may be increased, decreased, or eliminated, and not one management decision will be affected.⁸ When management uses data on depreciation it is in much more detail than that found on the profit and loss statement. Management decisions ordinarily require research that goes far beyond the statements. Another important consideration is that, regardless of the amount of the depreciation reported on the profit and loss statement, the working assets of the business are not changed. The writer submits the following: that all we accomplish by depreciating on replacement cost is the reduction of the amount of the profits reported in periods of rising prices. And he thinks it is safe to say we won't hear much about such depreciation when prices are dropping except from companies in financial difficulties. But possibly the reporting of lower profits would warrant the use of this method. We must examine this possibility.

It is argued that the conventional methods overstate profits in the terms of real things and therefore contribute to inflation

and instability in two ways: (1) by leading to wage demands which increase costs, prices, and create a vicious circle, and (2) by misleading business men and causing them to expand unwisely.

There is no argument over the point that during periods of rising prices profits do not represent actual gain in economic goods, but neither do increased wages, rents, or any other flow of income within our society. In such periods all groups are affected by the fluctuating dollar. If we think we can check wage demands by increasing depreciation in order to lower reported profits, we are being very naive. This isn't going to deceive the well-trained analysts of the labor organizations. They know what is going on, and they know enough about depreciation not to pay much attention to it anyway. The solution of this problem lies in honest, frank disclosure of the dollar profits, and in the education of labor and the public to the effect that profits should be higher in periods of rising prices. This latter policy is much more likely to be successful than one of attempted camouflage, which will lead only to labor reports like the extreme Nathan report. It is significant that among those industries which are most vociferous in insisting on higher depreciation are some of those most reluctant to deal with labor on a factual basis.

As to business expansion being caused by management's being misled by profits which are not real, as some economists have argued, little need be said. Business men aren't ignorant; they know that the profits are in different dollars. If any evidence of this is needed, all we need do is refer to the mass of current business literature on the topic. Business men are influenced to expand plant and equipment in periods of prosperity when they see the possibility of making profits, but they know better than anyone else that these profits do not have the same purchasing

⁸ Depreciation for tax purposes is a different problem.

power as they would have if prices were lower.

The current cost method may result in our reporting profits somewhat closer to real profits (profits in terms of economic goods) than the original cost method does. The LIFO method of handling inventories tends to accomplish this. However, depreciation based on replacement costs may not have this effect. We do not know that all the plant assets will be replaced, and if they are, we do not know what the replacement cost will be. It will probably be entirely different from current costs, and even though some replacements are made at current costs this shouldn't justify computing all depreciation on this basis. Such a procedure may bring us no closer to real profits than the original cost method.

Now let us return to a consideration of LIFO, and assume that the switch to LIFO is made, as it should be, before prices increase. Under such circumstances, LIFO will tend to compensate for price changes in the dollar, and reduce profits in periods of rising prices and increase them in periods of decreasing prices. Again this writer believes that this practice has accomplished nothing but the reporting of more stable profits; and, it is extremely doubtful if this is desirable. We have given the management no information that it did not have before. Managers, whose accounting records are now on a FIFO basis, may know just as much about their inventories as do those on LIFO. And since they do not have the cushion, in the nature of a secret reserve, that the LIFO people have, it could be argued that they will pay more attention to the control of these inventories. Certainly they are not likely to do any poorer job of inventory control than the LIFO people. Accounting has gained little if anything from LIFO, and may have lost a great deal. It has caused confusion in accounting that dwarfs the inconsistency many accountants have con-

demned in cost or market whichever is the lower. It is now absolutely impossible for stockholders and investors to make any valid comparisons of the profits of companies even in the same industry when some report under LIFO and others do not.

If we disregard the weaknesses of LIFO and assume we are to depreciate on replacement costs, we encounter additional difficulties. Replacement costs for much of the plant and equipment are in the realms of speculation. Who knows what the costs of replacing the existing plant and equipment are? Just observe the substantial differences in bids on construction projects. Whether index numbers or appraisals are used there can be vast differences due to differences in opinion.

From the foregoing arguments it will be quite obvious to the reader that this writer believes that accountants should adhere to original costs. In fact he would go so far as to advocate the return to original cost on a first-in, first-out, basis whenever practicable. Those of us who favor the return to original costs do not do so because of tradition, but because we believe that accounting does a better job in this way than it can in any other way. With original costs we have something objective from which we can work, something definite over which we do not have to speculate. We have our difficulties in allocating these costs to revenue, but we do have a definite starting point. If we should add to our present problems such a speculative factor as depreciation based upon replacement costs, we will have lost much of the objectivity for which we have long striven. If the gain were worth it, the change would be justified, but it is doubtful if we would gain anything. We would be sacrificing objectivity; we would be making profits much more subject to manipulation than they now are, and would thereby increase public distrust of reported profits. Will anyone ar-

gue that the practices followed in the last few years by a few of our leading industrial firms of increasing depreciation because replacement costs are up, and of charging what they consider abnormal construction costs to profits, are building up confidence in accounting statements? Current lack of confidence in our statements is not caused by the fact that real income is not reported. No one expects us to report real income. It is caused by the chaotic inventory situation, the improper use of reserves, the charging of unusual adjustments to profit and loss, etc. If we adhere to original cost, on a first-in, first-out, when practicable, discontinue the improper use of reserves, and emphasize the profit after the recurring items, we shall be on the way to the increasing of confidence in our statements. At the same time we must educate the public to the fact that the profit or loss reported is only an estimate. Even under the original cost framework we still have much to do. For example, little work has been done on the problem of capital and revenue expenditures.

The reported profits have never been claimed to represent real economic gain in terms of goods any more than an investor's profit of \$50,000 made during a period of rising prices represents in its entirety economic gain. The reported profit simply represents the estimated gain in terms of dollars as the measuring unit, the measuring unit used by all other segments of society. It provides stockholder and investors with some evidence of the management's stewardship over the dollars entrusted to it, an approximation of the gain in dollars that management has succeeded in making.

There are many misconceptions of the profit and loss statement. Too many people think it is something that it is not. For example, we see statements made to the effect that present accounting conventions give correct results only in periods of stable prices. People who so believe are

thinking of profits in terms of purchasing power dollars or real income, something accounting has never claimed to provide. To expect management to account for the purchasing power entrusted to its care, instead of the dollars entrusted would be quite a large order, and goes beyond what we expect of any other group in society.⁹

This writer believes that the interests of all will be best served if we show profits in dollars just as we are doing today, and that we do somewhat as Wixon suggested in the April issue of the *ACCOUNTING REVIEW*,⁹ and give some indication of the profits, possibly as follows.

Disposed of as follows:

To Finance Inventories	xx
Finance Receivables	xx
Finance Additions, Improvements, and Replacements	xx
Reduce Liabilities	xx
Increase Cash	xx
	—

This summary of the disposition of profits need not be accurate. Its purpose is simply to convey the information that the profits are not all free for wage increases and dividends. In fact a sentence or two of explanation, serving to qualify the profit figure, should be sufficient.

Accountants are in a weak position in defending their conventions because so much of the literature concerns valuation; and value theory and valuation are among the most controversial terms in both philosophy and economics, as witness the following quotation:

We are accustomed to scoff at the literature on the time-honored controversy on value. But what else is at the bottom of it, overlaid, it is true, by the mass of speculative verbiage, if not the truly scientific research for an economic unit of measurement, or several such units adopted to different classes of phenomena.¹⁰

The fact is that accountants have never

⁹ Wixon, R., *THE ACCOUNTING REVIEW*, April, 1949, pp. 184-190.

¹⁰ Schumpeter, J., *Econometrica*, July 1933, p. 7.

been valuers. We have discussed value, and answer the economist and the appraiser by stating that we do not use any type of valuation theory with which they are familiar, that we actually use outlay cost. Why don't we admit this at the start? Admit that a fundamental part of our work involves accounting for outlay costs and

the matching of these costs with revenue. Within this framework we have still much to do, and within this framework we can in all probability render our greatest services to society. But we won't render this service by any one statement or a dozen statements, but by research.

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DEPRECIATION ACCOUNTING UNDER CHANGING PRICE LEVELS*

HARVEY M. SPEAR

HOW FINANCIAL reporting can portray the effect of changing price levels in corporate statements continues to be one of the most important problems facing financial and accounting circles. Of great concern is depreciation accounting. Fixed assets are being depreciated on a cost basis while replacement of such assets on retirement may be at higher replacement costs. With high dollar profits appearing on profit and loss statements, corporations have been subject to demands from all sides: labor, stockholders, price reductionists, and tax-minded public officials have sought to lay claim to part of these profits. Recent Congressional hearings on corporate profits have centered much publicity on the problem; experts in economics, accounting, business, and finance have recently testified that profits were "overstated," that they were not really as high as they appeared from financial statements, and that accounting practices were not adequately portraying the true picture.¹ At the heart of the problem are very serious matters of the gravest import to financial circles, business management, and accountants.

The cause of all the difficulty is that financial reporting has traditionally been done in terms of the accounting dollar (i.e. the dollar bill), because it is the common denominator and representative of value, which value it has been hoped would not vary. Unfortunately for accounting the dollar has no value in and of itself but only as the equivalent of something that does

have value; money, of course, is merely a medium of exchange, and it is tied to its basis by legislative fiat. But, in spite of its shortcomings, the accepted medium of exchange, money, is the only practical unit of accounting and should continue as the term in which operations are reported; fluctuations in its relative value must be adjusted for in conjunction with financial reporting.

Accepting the fluctuating dollar value as a reality, we come to a basic consideration of finance: Assuming that, when the public invests its funds in corporate enterprise, it intends to leave that investment in the business and only desires to receive a return on that investment in the form of a share in profits, how should that original investment be regarded? It is a well established rule, accepted by courts as a common law limitation on dividend distributions, that original capital investment must not be impaired but must be conserved to continue the enterprise. The crux in our problem is in what is meant by "conservation" *for accounting purposes*: dollar conservation or purchasing power conservation?

Maurice Moonitz believes that investors are interested in profits alone, and that "whether real capital is increased or decreased in the process is a matter of relative indifference to the owners (as contrasted with the community as a whole) as long as the stream of revenues is maintained at a satisfactory level."² But George Terborgh, economist for the Machinery and Allied Products Institute, believes that investors in capital goods are entitled to recover the economic or purchasing power value rather than the monetary value of

* This paper was recently presented at a graduate seminar at the George Washington University. The views expressed are those of the author and do not necessarily express those of the Securities and Exchange Commission.

¹ *Corporate Profits*, Hearings before the Joint Committee on the Economic Report, 80th Cong., 2d Sess. (U. S. Government Printing Office, 1949).

² Maurice Moonitz, *THE ACCOUNTING REVIEW*, April, 1948, p. 140.

their investment.³ "The importance of capital recovery originates in the principle that no income exists until proper provision has been made to keep the invested capital intact by some means."⁴

As a practical matter investors are concerned with both profits and their basic investment. The investor who anticipates that there will be an inflation would seek to put his money into real goods and might buy commodities. The investor who anticipates that there will be a deflation would think in terms of keeping his funds in the form of liquid cash. Presumably the securities investor is comparable to the investor in physical goods or commodities, although the security holder owns his property indirectly through the share of stock or jointly with other stockholders. He expects to have an indirect interest in physical goods, which goods he hopes will have a purchasing power that rises proportionately with the rising price level. If he anticipates deflation, he might withdraw his interest in real physical goods in order to maintain a given number of dollars as deflation would make the dollar more valuable. The public is accustomed to the dollar concept of value representation, but the investor is also interested in the purchasing power concept of his invested capital.

Management must therefore conserve not only the same amount of accounting dollars but they must conserve the same amount of economic dollars. "Economic costs are those that reveal profits only when those profits can be withdrawn and leave the physical property intact or substitute enough fiscal assets to restore the physical property to its previous condition at current prices."⁵ But the job of conserv-

ing capital through conservative dividend distribution policies and the job of portraying economic dollars and costs are mutually independent jobs; they need not be the function of accounting nor the basic concern of the accountant. To attempt to intermingle the accounting dollar and the economic, purchasing-power dollar results in confusion. Conserving capital should not be confused with depreciation reporting.

ACCOUNTANT'S RESPONSIBILITY

The role of the accountant in the past thirty years has been based upon confidence and trust. He has served as financial reporter and in certain respects as financial adviser. His job has been to present a report that portrays the financial picture to millions of interested people. He has always reported in terms of the accounting dollar, and the public, educated to the dollar bill and not the economic dollar, has understood his terms.

Financial reporting has not concerned itself with different concepts of income. Corporate income may be quite different when considered in its legal aspects, its tax aspects, its economic aspects and its accounting aspects. In a stable economy the differences between economic and accounting concepts of income were not important, but now that accounting concepts are becoming perfected and the monetary unit is quite unstable, the differences are more noticeable. It is these differences which give rise to the criticism that current corporate reports are erroneous or misleading in that profits are "overstated."

"Nothing is indeed more elusive, particularly during and after a period of monetary inflation, than the conception of profit. A definition which would satisfy the economist would be of little practical value to the accountant or to the drafter of tax codes; a practical working definition will always fall short of economic truth."⁶

Costs," *The Commercial and Financial Chronicle*, June 5, 1947, pp. 2977, 3006.

⁶ Editorial, "Tax on Unreal Profits," *The London Times*, Air Edition, Monday, December 6, 1948, p. 7.

³ "The Depreciation Dilemma," *Fortune*, January, 1949, p. 67.

⁴ Pilson W. Kelly, "The Recovery of Capital," *The New York Certified Public Accountant*, August, 1948, p. 569.

⁵ Alden Rice Wells, "Accountants Ignore Economic

It is one thing to assert that profits are "overstated" and adjust that "overstated" figure, but another thing to say, more accurately, that accounting profits are accurately stated and that some adjustment should be made to provide for possible future added costs of replacement. After the accountant has portrayed his story in traditional and more understandable terms of the dollar bill, statisticians (who could also be statistical accountants) might *thereafter* attempt to translate or explain the significance of the report in terms of purchasing power of the dollar. The reporting in terms of accounting dollars and the translation into other languages must not be intermixed, lest the former be visited with the possible misunderstandings based upon the latter.

FUNCTION OF DEPRECIATION

The dispute between those who believe that accounting should be in terms of the dollar bill and those who would have it in terms of the economic dollar is most often directed at depreciation accounting. Those who believe that accounting should be kept separate from economic reporting believe in depreciating fixed assets on their original cost, while the economic reporters would have depreciation itself provide a sufficient reserve against which the added costs of replacement due to higher replacement costs could be charged.

What, then, is the function of depreciation accounting? Must the concept of preserving the invested purchasing power be incorporated into depreciation accounting, or is there a better way of handling the preservation of purchasing power invested? Writers continue to disagree on the answer. Many articles have appeared on various phases of this subject. The proponents of a change in depreciation policies to represent replacement costs have stimulated much controversy. Groups in management, concerned over the added costs

of replacements due to the rising price levels, have sought to make the problem of financial management into the problem of depreciation accounting. Instead of accepting accounting as the scientific profession of reporting what *is* and *has been*, their first reaction is to add the burden of providing for *anticipated* added replacement cost to depreciation accounting responsibilities. Accountants will best serve business, finance, and the public if they make certain the problem is handled by the proper officers of management with the proper considerations.

The accounting profession, as represented by the American Institute of Accountants, has long stood for the proposition that the sole function of depreciation accounting is to allocate cost.⁷ The Chief Accountant of the Securities and Exchange Commission has said that depreciation accounting is a procedure whereby the cost of productive facilities is allocated as equitably as practicable over the period of usefulness of the facilities and has also noted that the cost of replacement of the facilities at some future date has no bearing on the accounting for the assets currently in use.⁸

"The periodic depreciation accrual measures the portion of a previous expenditure which is considered applicable to current activity. Plant cost is an extreme form of prepayment; depreciation accounting is the means by which such prepayment is assigned to production."⁹ Depreciation is the "accounting for a past expenditure, not a provision for a future one."¹⁰ On the other

⁷ American Institute of Accountants, *Accounting Research Bulletin No. 33*, December, 1947.

⁸ Earle C. King, "Some Current Accounting Problems," An address before the 22d Michigan Annual Accounting Conference, Ann Arbor, Michigan, November 15, 1947.

⁹ W. A. Paton and A. C. Littleton, *Introduction to Corporate Accounting Standards*, 1940, p. 88; see also Paton, "Depreciation and the Price Level," *THE ACCOUNTING REVIEW*, April, 1948, p. 120.

¹⁰ Perry Mason, "Depreciation and the Financing of Replacements," *THE ACCOUNTING REVIEW*, Vol. X, December, 1935, p. 320.

hand the revisionists believe that "a correction of the situation calls for all assets to be carried at market prices prevailing on the date of the balance sheet," and depreciated on that market price.¹¹

Although the courts have not conclusively determined the function of depreciation for all purposes, there is an interesting line of Supreme Court cases wherefrom one can conclude an endorsement of the accountant's view of the function of depreciation. It is interesting to note that the Court went from the view that depreciation should provide as a minimum a reserve to cover replacement value¹² to the current view that a depreciation base of original cost was not confiscatorily too low even where the price level had risen considerably.¹³ Under the *Hope* case there now is discretion in the administrative body to base the rate on either the original cost or replacement cost, but if it does use the original cost base and if that base is the lower, it no longer is confiscatory. One wonders what will happen to this discretion in ten or fifteen years, assuming that price levels fall from present heights. If prices fall, rates based on replacement costs of future deflated price levels may well be inadequate to provide adequate depreciation of costs now being actually expended and "invested" within the principle of Brandeis.

The law seems settled now from the *Lindheimer* and *Hope* cases that depreciation for utility rate purposes and tax purposes should be based on original cost. The rule of the American Institute of Accountants is in complete accord with this law.¹⁴

The problem of anticipated added costs of replacements in the future must not be incorporated into depreciation accounting; it should be the problem of financial management and not of the accountant.¹⁵ The accountant cannot include futuristic accounting nor economic accounting in his accounts and still accurately report operations as they happened *in the terms* in which they happened. The question is what should be done with the profits made, and not what should be done to change the profit determination before it is figured.

EFFECT OF DEPRECIATION RESERVE

In considering whether depreciation accounting should include the adjustment for price level changes, we should remember the place it occupies in financial reporting and the way it accomplishes its part of the job of portraying the year's operations and the company's condition. One of the reasons assigned for putting the responsibility on the accountant to handle the problems of inflation in depreciation accounting is that depreciation results in a reserve, which reserve, according to replacement-costers, does not "provide" for replacements of retired assets when price levels increase. Such proponents of a change add that replacement must be "purchased out of" these reserves and that they are inadequate for the purpose. So to speak disregards sound accounting precepts and the very nature of accounting reserves. The setting up of an added depreciation charge and an added reserve based on higher replacement costs does nothing more than to set aside a numerical amount which

¹¹ See Note 5, *supra*, at p. 3006. Cf. note 23, *infra*.

¹² *State of Missouri ex. rel. Southwestern Bell Telephone Co. v. Public Service Commission*, 262 U. S. 276, 289, 302 (1923); *United Railways and Electric Company of Baltimore v. West*, 280 U. S. 234, 253 (1930).

¹³ *Lindheimer v. Illinois Telephone Co.*, 292 U. S. 151, 167, 168; *Federal Power Commission v. Hope Natural Gas Co.*, 320 U. S. 391 (1944).

¹⁴ American Institute of Accountants, Accounting Research Bulletin No. 33, December, 1947.

¹⁵ "In a business operating consistently at a profit, funds equal to the depreciation charges do become available. The disposition of these funds and the providing of additional amounts, if these are inadequate for current replacement, is believed to be a financial problem of management and not a problem of accounting." Andrew Barr, "Are Current Depreciation Reserves Adequate?" An address before The Accounting Section, Milk Industry Foundation, Atlantic City, N. J., October 28, 1948.

would otherwise appear as earned surplus or some other equity account. In terms of elementary double-entry bookkeeping, reserves for depreciation are the credit entries. The principal advantage of making the appropriation of an added amount due to higher replacement costs could only be to separate that amount from earned surplus so that it would not be mistaken for ownership equity available for distribution. If no distributions are contemplated, there would be no change in corporate assets or financial condition due to the increase in depreciation reserves based on anticipated higher replacement costs.

It is significant that depreciation reserves are rarely funded. As the business continues to operate, such of the depreciable assets as are included in the product sold are exchanged by the sale of that product into cash or receivables, which in turn are reinvested in other assets. The worn-out increment of plant or equipment thus shows up in the form of such assets as are purchased with the cash or other consideration received in the sale of the product.

The problem of providing for the replacement of exhausted assets is not one of depreciation; the problem is solely one of how to handle the only item that loses purchasing power in times of ascending price levels: money, itself.

"The problem of inflation as far as corporate management is concerned boils down to prudent conservation of accretions to the stockholders' investment, the determination of a prudent dividend policy, and the determination of proper pricing policies insofar as those are within the control of the corporate management."¹⁶

There is the very practical problem of accuracy when depreciation is based on replacement cost. Insofar as depreciation is based on actual original cost, the product

owned is being depreciated. But when you depreciate the replacement cost or present value, you are basing depreciation on an estimate which may be subject to change in each accounting period.

BASES OF CORRECTIVE PROVISIONS

Although the testimony before the Congressional Committee studying profits in December, 1948, was that under current accounting practices corporate profits are "overstated," in reality profits *are* accurately reported and are not misstated. There is no question but that the corporations are earning the profits reported before price level adjustments; the only problem is one of proper disposition or ear-marking of such profits.

There are two different reasons advanced for making special provisions for price level changes. One type of provision is based on the theory that future costs of replacement will be higher than original costs, and such provision is in anticipation of the added costs of replacement. The second type of provision is based on the theory that present costs being incurred during this period are higher than normal, and this provision is to reduce the incurred costs of construction during current periods. Although these two rationales for making adjustments differ in that the first relates to future *anticipated* costs not yet incurred and the second to costs already *incurred* in current construction, they are both price adjustment provisions.

It would seem that the reasoning based on costs actually incurred rather than those anticipated is sounder. Since accounting should make its reports in terms of known costs, provisions based on incurred costs have a much firmer foundation than those based on anticipation.

METHODS OF CORRECTIVE PROVISIONS

Hand in hand with the question of the basis of the provision is the problem of

¹⁶ George D. Bailey, "Relationship of Accounting to Other Factors in Accurate Reporting of Inflationary Income," *Journal of Accountancy*, November, 1948, p. 364.

where in the accounts to make the adjustment. The inclusion of the price level problem in the depreciation account was discussed above. Assuming that changes in price levels are not to be adjusted for in depreciation accounting, the next problem is what if any adjustments should be made.

One suggested method is to revalue the balance sheet assets by the use of supplementary accounts to show the increase over original costs.¹⁷ This suggestion is merely an indirect method of getting the adjustment provision into the depreciation base.

Provisions have been of three further types: (1) charge a special adjustment to operations not as specific depreciation but as a separate deduction; (2) set up a special reserve appropriation out of the net income at the bottom of the net income statement; or, (3) set up a special reserve appropriation out of earned surplus.

Special charge to operations

For the same reasons that depreciation accounting should not include adjustments for anticipated higher costs of replacements, so also should operations and profits not be charged in any other way for future financing problems. Financial reporting should portray corporate activities as they happened *in the terms* in which they happened, and profits should not be reported on the basis of future financing. Adjustments for the future problems should be made only *after* profits have been reported.¹⁸

In 1947 several large corporations charged operations with special charges for *anticipated* higher replacement costs; corporations which filed reports with the Securities and Exchange Commission containing such charges included United

States Steel Corporation and Libbey-Owens-Ford Glass Company.

Other large corporations charged 1947 operations with special charges for excessive costs of replacement construction costs currently *incurred*. The report of Chrysler Corporation included added charges to operations of this latter type in the form of accelerated depreciation charges, which acceleration was based on the contention that the present high costs of construction had to be incurred in order to obtain an added share of the current and temporarily swollen demand for new cars. The initial report of E. I. duPont de Nemours & Company included an added charge to operations in the nature of a writeoff of such costs of construction incurred in plant being built during that period as were believed to be exorbitant; such costs were charged to operations in 1947 and credited to a reserve for depreciation but they were also included in the plant account.¹⁹ Thus, before the plant was put into use, part of its cost had already been charged to operations and a depreciation reserve started. Two distinguishing features between the Chrysler and duPont reports are that (1) Chrysler's related to plant in use during the period, while duPont's related to costs incurred during the period on plant not then in use; and (2) Chrysler depreciated the entire cost at an accelerated rate, whereas duPont charged off the "excessive" construction costs in the period of construction by setting up a depreciation reserve for such amounts.

¹⁹ A solution whereby the appropriations for abnormal construction costs are made from *earned surplus* is presented in the Annual Report of the Liggett & Myers Tobacco Company for the year ending December 31, 1948. This Report shows an appropriation for \$2 million on a separate statement of surplus for the cost of "facilities added since the war," and the account is described as "Appropriation for Excessive Costs of Fixed Assets." The original 1947 report of duPont and this 1948 report of Liggett & Myers are similar in that both provide that depreciation will continue to be charged against income on the basis of costs actually incurred, which include the "abnormal" construction costs.

¹⁷ W. A. Paton, "Depreciation and the Price Level," *THE ACCOUNTING REVIEW*, April, 1948, p. 122.

¹⁸ Carman G. Blough, "Current Accounting Problems: Replacement and Excess Construction Costs," *Journal of Accountancy*, October, 1947, pp. 333, 334.

The Commission required Chrysler to restate the explanation of its accelerated depreciation charges in order more clearly to relate the charges to production. None of the other above-mentioned initial reports filed by the above companies charging operations for 1947 with replacement reserves were acceptable to the Commission.

Amended reports have been filed in most of the cases where the original reports were not acceptable; the amendments were of three types: (a) some of the corporations restated their basis for making the added accelerated charges in such a way as adequately would justify the charges to operations; (b) other corporations removed the charges from operations and showed the provisions as appropriations of net income, with the balance therefrom being carried to surplus; and (c) some corporations removed the charges from operations and showed the provisions as appropriations of earned surplus on the surplus statement.

Chrysler Corporation restated its reasons for accelerated depreciation and tied its policy directly to production during the first years after the expenditures. United States Steel Corporation in its recent report on the last quarter of 1948 indicated it would shift over from provisions based on anticipated replacement costs to provisions based on current costs actually incurred, which costs would then be depreciated at an accelerated rate related directly to production (i.e. to plant capacity in use); such changes were to be made retroactive to January 1, 1947. In its annual report for 1948, duPont has also adopted this accelerated depreciation technique. Presumably henceforth duPont, Chrysler and United States Steel will continue to make such accelerated charges to operations.

Such charges based on justifiable policies of accelerated depreciation for costs actually incurred are acceptable under Bulletin No. 35 of the American Institute of Ac-

countants. But charges to operations based on *anticipated* higher costs of replacements are not in accordance with this Bulletin nor with the stated policy of the Securities and Exchange Commission.²⁰

Appropriations of Net Income

Many of the corporations which had made their adjustments by charging operations, removed the charges from inside the income statement and made an appropriation of a similar amount *from* the net income. This group included both duPont, which had based its provisions on construction costs actually incurred during the period, and Libbey-Owens-Ford, which had based its provisions on anticipation of higher replacement costs.

In its 1947 report, the Crane Company made its appropriation based on anticipated higher costs of replacement from the net income figure. The balance remaining was called "Balance Transferred to Surplus" in the report for 1947 filed with the Securities and Exchange Commission.

Accounting Research Bulletin No. 35 of the American Institute of Accountants, which recommends the third method above does not approve of making either of these appropriations (i.e. duPont or Libbey-Owens-Ford) on the income statement.²¹ The Securities and Exchange Commission appears to be in complete accord with Bulletin No. 35, which applies to 1948 reports. The objective has been to require as many precautions as possible to make certain that the reader of the income state-

²⁰ Earle C. King, "New Trends in Published Reports." An address before the Accounting Conference, Agricultural and Mechanical College of Texas, College Station, Texas, May 4, 1948; American Institute of Accountants, Accounting Research Bulletin No. 33, December, 1947, Accounting Research Bulletin No. 35, October, 1948.

²¹ American Institute of Accountants, "Illustrating Methods of Income Presentation Under Bulletin No. 35," *Journal of Accountancy*, December, 1948, p. 464; Carman G. Blough, "Why Accounting Research Bulletin No. 35 Was Issued," *Journal of Accountancy*, January, 1949, p. 32.

ment understands that the profits figure is the unappropriated and unadjusted net income figure.

Appropriations of Earned Surplus

The most satisfactory method of showing appropriations to cover anticipated higher costs of replacements is to make them directly from earned surplus in the surplus statement. The Institute has specifically endorsed this as the most desired method in its Bulletin No. 35. The Chief Accountant of the Securities and Exchange Commission has also noted that this is the preferred method, although annual reports for 1947 making the deduction from net income on the income statement were accepted where the balance was not called "income," but rather "balance transferred to surplus."²²

Of the above three types of provisions, the appropriation from earned surplus is most desirable from a practical viewpoint. When the deduction is made from net income, the balance is often referred to as the "actual" income or as the only "true" income. Even if it is properly named as a "balance" on the profit and loss statement, it is often referred to in such a way as to cause the unskilled reader to believe that the balance is the profit for the period. Reports to stockholders and newspaper stories often take the final item on the income statement as the true figure, irrespective of its name or designation. Per share earnings are often computed on the basis of that final figure.

Professor Sanders' suggestion is that the companies "should make clear beyond question which figure they regard as 'income for the year,' even though they feel some doubts and qualifications about it, and even though these doubts are given expression elsewhere in appropriations out of in-

come. Furthermore the item which is so designated in the income statement is the one which should be used also in the president's report, in his discussion of income, and in all publicity on the subject."²³

As a practical matter, however, the adoption of Professor Sander's suggestion cannot be depended upon. The last figure on the income statement rather than the "net profits" before the deduction of the appropriation will most commonly be considered the net profit. An appropriation from the earned surplus account instead of the profit and loss account would avoid the possibility of confusion.

The Institute of Chartered Accountants in England and Wales has recently issued an excellent statement in support of depreciation based on cost and made the following recommendations to assist in the changing price level problem:

- "(1) Any amount set aside to finance replacements at enhanced costs should not be treated as a provision which must be made before profit for the year can be ascertained, but as a transfer to reserve. If such a transfer to reserve is shown in the profit and loss account as a deduction in arriving at the balance for the year, that balance should be described appropriately.
- (2) In order to emphasize that as a matter of prudence the amount set aside is, for the time being, regarded by the directors as not available for distribution, it should normally be treated as a specific capital reserve for increased cost of replacement of assets.
- (3) For balance sheet purposes fixed assets should not, in general, be written-up on the basis of estimated replacement costs, especially in the absence of a measure of stability in the price level."²⁴

Insofar as these recommendations permit deductions for the added provisions to be

²² In May, 1948, King recommended that these special adjustments "should be treated only as appropriations of earned surplus." Earle C. King, "New Trends in Published Reports," An address before the Accounting Conference, Agricultural and Mechanical College of Texas, College Station, Texas.

²³ Thomas H. Sanders, "The Annual Report: Portrait of a Business," *The Harvard Business Review*, January, 1949, pp. 1, 6.

²⁴ The Institute of Chartered Accountants in England and Wales, "Recommendations on Accounting Principles," January 14, 1949.

shown on the income statement, they are not completely in accord with the recommendations of the American Institute of Accountants and the Securities and Exchange Commission.

An alternative method to the above three would be to show the appropriation provision as a deduction on a separate statement. "Something of this kind is badly needed in a period of disturbed conditions such as now exists."²⁶

The method of appropriating provisions for anticipated higher costs of replacements from earned surplus will just as effectively earmark and set aside the earnings as the other more controversial methods. In addition, the more satisfactory appropriations from earned surplus will gain confidence in the dependability and accuracy of accounting reports.

LIMITATIONS ON APPROPRIATIONS

Deductions or allocations made from the earned surplus account should be realistic. If the appropriation is based on anticipated added costs of replacements, a determined effort should be made to ascertain the loss of purchasing power resulting from the exhaustion of assets depreciated on an original cost basis; consideration should be given to determining as accurately as possible what part of the depreciation reserve went into assets which did not lose purchasing power and what part went into assets that lost value in the inflationary ascension of the price level. The adjustment must necessarily be tied to the increments of lost purchasing power; any vague and over-all adjustment should not be acceptable to the scientific fact-minded accountant.

As noted above, the worn-out increment of plant or equipment shows up in the

form of such assets as are purchased with the cash or other consideration received in the sale of the product. Insofar as this cash or other consideration is reinvested in added inventory, supplies, or any other real goods which maintain the same relative purchasing power in times of changing price levels, then there is less lost purchasing power when the price level rises than if the consideration received is kept in cash. Calculations to determine the appropriations from earned surplus necessary to provide for future financing needs should consider that, where increments of worn-out plant or equipment show up by re-investment as real goods which maintain relative purchasing power, the original purchasing power or capital invested in plant or equipment is maintained and no appropriations for such amounts are necessary.

Appropriations of earned surplus made for anticipated excess of replacement over original cost should be limited to plant or equipment near retireable condition, since price levels could continue to fluctuate before ultimate replacement. Experts differ on the future of the price level and it would seem that only assets to be retired within a reasonably imminent time should be the basis of such adjustments.

CONCLUSION

The problem of changing price levels is not a problem that should be included in depreciation accounting. Insofar as the depreciation charges based on cost are not matched with real goods of equal purchasing power, corporate management should make some special provisions to preserve the financial integrity of the business. These provisions should be in the nature of appropriations of earned surplus in order to represent on the balance sheet the ownership equity available for distribution and the ownership which must be maintained for preservation and continuance of the enterprise. All adjustments or pro-

²⁶ George D. Bailey, "Depreciation and Inventory Reserves," An address presented before the American Management Association, January 16, 1948. Cf. Editorial, "Inflation in Financial Statements," *The Illinois Certified Public Accountant*, September, 1948, p. 2.

visions, however, must be made after income has been figured in conventional terms. Accounting must continue to report operations as they happened in the terms in which they were conducted. The responsibility of making provisions for changing price levels is one which ensues after financial reporting has presented the statements and reports for the period.²⁶

Certain economists and accountants continue to urge that depreciation be based upon present value or replacement costs. Such groups are not in agreement with the American Institute of Accountants and with the Securities and Exchange Commission; their efforts to change the tradition-

ally accepted methods remain undiminished. The language of Accounting Research Bulletin No. 33 which says that depreciation on present value is "not . . . a satisfactory solution at this time [December, 1947]" is interpreted by these groups to mean that the principles of Bulletin No. 33 were only meant to be temporary. At frequent intervals they assert that the time has become ripe for a change. Such continued conflict within accounting circles tends to undermine confidence in generally accepted accounting principles. Financial reporting and the accounting profession will best serve themselves if they recognize that the problem of changing price levels is not one of depreciation accounting and that the adjustments should be made as are other financial appropriations: on the surplus statement.

²⁶ Harvey M. Spear, "Dividend Policies Under Changing Price Levels," *Harvard Business Review*, September, 1949.

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CONSISTENCY AND CHANGING PRICE LEVELS

J. FRED WESTON

THE MAGNITUDE of the post-war price increases and the forecasts by competent economists of the likelihood of a continued secular price rise have had considerable influence on published views of accountants. Accounting literature during the past eighteen months has increasingly reflected the viewpoint that accounting procedures should drop the assumption of a stable monetary unit and should recognize changes in the purchasing power of money. These recommendations have, however, been generally limited to inventory accounting and to the measurement of depreciation charges.¹ What is required is a recognition of all of the major accounting consequences of changing general price levels.

To ascertain the nature of these effects it is necessary to analyze the concept, "changing price levels." When the price level rises, (1) has the value of real assets risen while the purchasing power of money has remained constant or (2) has the value of real assets remained constant while the purchasing power of money has fallen or (3) has the value of real assets risen while the purchasing power of money has fallen? The appropriate answer may be found by a consideration of the fundamental nature of money.

One of the functions of money is to provide a numeraire, a common measure of values. The real value of a specific commodity is not defined by its absolute price, but by its price in relation to the prices of

all other goods. Relative prices reflect relative values. The values of specific goods change when the *structure* of prices changes. The value of a specific good may be measured by the ratio of its price to an average of all other prices. By the same principle, the value of money is defined to vary inversely with an average of the prices of all goods and services.² This value may be measured by the ratio of any arbitrarily chosen constant, e.g., 1, to an average of all prices. While the value of a specific commodity may vary with changes in either the numerator or denominator of the expression by which its value could be computed, the value of money changes only when the denominator of the expression changes; this is because money has no "price," but is a device one of whose functions is to provide a language for expressing prices.

If price levels change, reinforcing influences are set in motion. Money itself is used as a medium for investment and disinvestment. There exists a demand for and a supply of money itself. These demand and supply conditions may change and result in consequent changes in the price level (the value of money). From this standpoint, the theory of the value of money is simply a part of general value theory. The value of money is determined by the same principles as the values of other economic goods.

From the above concepts, some generalizations may be drawn. If a general price index rises with an unchanged structure of prices, the values of specific goods have not changed, but the purchasing power of

¹ A notable exception is the article by Ralph C. Jones, "Effect of Inflation on Capital and Profits: Record of Nine Steel Companies," *Journal of Accountancy*, January, 1949, pp. 9-27. Professor Jones stabilizes the accounts of the firms in terms of an historical base period, rather than in terms of current dollars.

² As a practical matter, measurement is performed by constructing indexes of a limited number of commodities.

money has fallen. The units of the measuring rod are changed, but the dimensions of the objects measured are not thereby changed. If the price of one item, A, of a price index rises while the prices of all other items in the index remained unchanged, the value of item A has risen, the values of all other items have fallen, the price level has risen, and the purchasing power of money has fallen. If the prices of items A and B of a price index rise by equal relative amounts, the values of A and B have risen, the value of A relative to B is unchanged, the price level has risen, and the purchasing power of money has fallen. If the price of item A rises by a greater percentage than B, the conclusions of the preceding illustration are modified in that the value of A relative to B has risen. Results for other variations from these type cases can be ascertained by similar reasoning.

The foregoing generalizations indicate important practical economic consequences of changing price levels. Holders of "real" assets neither gain nor lose with changes in the general price level, if the structure of prices has not changed. If, however, the price structure has changed, there may be gains or losses. If a firm holds assets which have risen in value relative to other assets (i.e., the use of the assets gives rise to a flow of net receipts which increases to an extent greater than the relative rise in the relevant price index) a gain may be realized. A gain is also realized if holdings of relatively high priced assets can be replaced by relatively low priced assets. On the other hand, holders of cash, assets which represent claims to cash, or obligations receivable in cash, the total of which exceeds dollar debt obligations, benefit or lose when the general price level changes even with an unchanged price structure. For example, when the price level rises by 100 per cent, a holder of cash or instruments payable in current dollars incurs a

loss of one-half of the original purchasing power of his money fund. When the price level falls by one-half of its previous level, a holder of cash or instruments payable in cash achieves a gain in purchasing power of 100 per cent.³ Conversely, it can be shown that holders of net debt obligations payable in current dollars benefit when the price level rises and incur losses when the price level falls.

If changed price levels require modifications in inventory pricing procedures and depreciation cost measurement, gains and losses arising from changes in the value of money must also be recognized. Paton expressed this view clearly.

Sweeping changes in the value of the dollar bring about unrecognized losses or gains all along the line. A cash balance of a million dollars, for example, may represent much less purchasing power at the end of the year than it did at the beginning of the period, but the very real loss involved is not disclosed by the conventional income statement. Similarly, outstanding liabilities represent a speculation in the value of money, with the possibility of very substantial loss or gain.⁴

H. W. Sweeney has emphasized, more than any other individual, the influence of changing price levels on the accuracy and relevance of accounting reports.⁵ He sets forth three objections to "ordinary accounting." First, it is misleading because it does not present current values.⁶ Second, ordinary accounting is mathematically unsound because assets are valued in dollars

³ Increased liquidity preference in a period of falling prices reflects in part a rational policy of investing in a security carrying no interest return but with apparently favorable prospects for capital gains.

⁴ W. A. Paton, "Depreciation and the Price Level, A Symposium," *THE ACCOUNTING REVIEW*, April, 1948, p. 123.

⁵ H. W. Sweeney, *Stabilized Accounting* (New York: Harper and Brothers, 1936).

⁶ *Ibid.*, pp. 3-6. Sweeney presents this point differently, but the above presents the significance of his discussion. For a forceful statement of the need for the use of current costs in the determination and reporting of income see W. J. Graham, "The Effect of Changing Price Levels upon the Determination, Reporting, and Interpretation of Income," *ACCOUNTING REVIEW*, January, 1949, pp. 15-16.

of different purchasing power.⁷ Third, ordinary accounting is incomplete because gains and losses from changes in the value of money are not computed.⁸ To remedy these defects, Sweeney proposes a method of "stabilized accounting" which expresses all items in financial reports in terms of the price level of a given date, usually "current dollars."

THE PROCEDURES OF STABILIZED ACCOUNTING⁹

The procedure set forth by Sweeney prescribes that the balance sheet items be stabilized first. Cash, claims expressed in fixed dollar amounts (for example, accounts receivable, notes receivable, bonds owned) and fixed dollar obligations (for example, accounts payable, notes payable, accrued liabilities, and bonds payable) are not adjusted initially. Physical assets are adjusted to current dollars by the use of "appropriate" indexes. This has the effect of presenting a capital gain or loss on all physical assets and a capital gain or loss on capital stock. In a period of rising price levels the capital gain on the former would be larger or smaller than the capital gain on the latter, depending upon whether the ratio of physical assets of total assets is larger or smaller than the ratio of capital stock to total equities.¹⁰ If the capital gain on the physical asset items is greater than the capital gain on the stated capital stock, the surplus items are increased. "Net stabilized total equities" may be defined as stabilized total equities less unstabilized surplus items. Stabilized total assets less "net stabilized total equities" equals the stabilized realized surplus.

Similar principles are applied in stabilizing the profit and loss statement. Practical difficulties arise since large numbers of transactions take place at different price levels in a period of frequent price fluctuations. To trace individual transactions might require thousands of computations. In Sweeney's examples, a relatively small number of income items is assumed. Stabilized gross income is computed directly from unstabilized gross income, but stabilized operating expenses are computed as a residual balancing item.

Sweeney's method will be briefly described since it illustrates the principles involved.¹¹ Throughout this description, it is assumed that the period covered by the financial reports is one in which the price level is continuously rising.

As suggested above, theoretically the realized gain or loss from changes in the value of money could be computed directly:

- (1) Calculate the loss in purchasing power resulting from the decline in the value of income between the time it was received and the end of the accounting period;
 - (2) Calculate the gain in purchasing power resulting from the decline in the purchasing power of expense between the time the funds were spent and the end of the accounting period;
- (1) less (2) is the gain or loss resulting from the change in the value of money.

In Sweeney's illustration it is assumed that it is possible to calculate (1), but not (2). Hence, the difference is computed by another method and stabilized operating expenses are calculated as a residual balance.¹²

¹¹ Paton's example, *op. cit.*, pp. 743-48, does not integrate the conversion of income-sheet data with the computation of gain or loss of buying power. Sweeney reports that in his earlier work he neglected this factor also, but later, as a result of critical review by J. H. Allen, developed procedures for analyzing this aspect. Sweeney states that he came to regard the calculation of gain or loss from changes in the value of money indispensable to the construction of a "satisfactory stabilized profit and loss statement." Cf. Sweeney, *op. cit.*, pp. 15-23; 40; footnote 5.

⁷ *Ibid.*, pp. 7-15.

⁸ *Ibid.*, pp. 15-23.

⁹ For numerical illustrations of the general propositions contained here, see Sweeney, *op. cit.*, and also W. A. Paton, *Advanced Accounting* (New York: Macmillan Company, 1941), Chap. XXXIII.

¹⁰ Since the bases of the two ratios are equal, this is equivalent to comparing the absolute amounts of the numerators of the ratios.

A gain or loss in purchasing power is computed for all "money-value" accounts.¹³ The net gain or loss in purchasing power in a period of fluctuating price levels depends upon the timing of receipts and disbursements, and upon the contractual nature of the transactions giving rise to receipts and disbursements. By applying the calculations to all money-value accounts, the influence of the second variable is automatically cancelled. The timing factor remains. For money-value asset accounts, there is a realized loss in purchasing power to the extent that the stabilized equivalent of debited amounts is higher than the stabilized equivalent of *corresponding* credited amounts.¹⁴ For money-value liability accounts, there is a realized gain in purchasing power to the extent that the stabilized equivalent of debited amounts is higher than the stabilized equivalent of corresponding credited amounts.¹⁵ There is an unrealized gain or loss on the balances of these accounts.¹⁶ For money-value asset items there is an unrealized loss to the extent that the purchasing power of the account balance is currently lower than its purchasing power when the balance originated. On money-value liability items there is an unrealized gain to the extent that the purchasing power of the account balance is currently *lower* than its purchasing power when the obligation was assumed by the firm.

The net *realized* gain or loss from changes in the value of money is used in the computation of stabilized operating expenses.

¹³ Professor Jones' method is based on a known lead-lag relationship between expenditures and revenues. The procedure can thereby be simplified greatly. *Op. cit.*, p. 27.

¹⁴ A term Sweeney borrowed from German writers, *op. cit.*, p. 16. This term is used here as meaning "assets which represent claims to cash."

¹⁵ A rising price level is assumed throughout this illustration.

¹⁶ See Paton, *op. cit.*, pp. 745-48, for a brief numerical illustration of these generalizations.

¹⁷ The unrealized gains and losses are not used in calculating the stabilized operating expenses, but are discussed at this time since the influence of account balances naturally arise in this discussion.

The following outline indicates the procedure:

1. *Begin with:* Stabilized realized surplus at the end of the current period (the residual balance resulting from stabilization of the balance sheet *less* the computed stabilized unrealized surplus, at the end of the current period).
2. *Deduct:* Stabilized realized surplus, at the end of the previous period.
3. *Equals:* Net increase in stabilized realized surplus during the period.
4. *Add:* Current stabilized debits to stabilized realized surplus during the period.
5. *Deduct:* Current stabilized credits to stabilized realized surplus during the period.
6. *Equals:* Stabilized realized net income for the period.
7. *Deduct:* (Stabilized) realized net gain on money-value changes.
8. *Equals:* Stabilized realized net income from business activities.
9. *Add:* Extraordinary stabilized debits to stabilized profit and loss during the period.
10. *Deduct:* Extraordinary stabilized credits to stabilized profit and loss during the period.
11. *Equals:* Stabilized realized net income from operations for the period.
12. *Deduct:* Item 11 from stabilized net sales for the period.
13. *Equals:* Stabilized operating expenses for the period.

In the above outline there is another stabilized item which requires an explanation, "stabilized unrealized surplus at the end of the current period." This is computed by first adjusting the stabilized unrealized surplus at the end of the previous period (but unstabilized with respect to the end of the current period). To this is added the unrealized net income for the year (the unrealized gain or loss on the *balances* of money-value accounts). The sum is stabilized unrealized surplus at the end of the current period.¹⁷

THE ACCOUNTING EFFECTS OF STABILIZING PROCEDURES

Fundamentally, stabilized accounting seeks to make corrections for fluctuations

¹⁷ *Op. cit.*, pp. 84-87; 116-19; 145-49.

in the size of the unit in which values are expressed. When price levels rise, the prices of physical assets also increase, but money-value assets remain at a constant price. If the timing and nature of a firm's receipts and disbursements were such that the firm neither achieved a gain nor suffered a loss in purchasing power during a period of a fluctuating general price level, and if the percentage fluctuation in the prices of all assets were exactly equal to the percentage fluctuations in the general price level, the effects of changing price levels would be completely removed from the accounts by the act of stabilization. If these assumptions were realized, the amount of "net income" shown by the firm would be the "net income," in current dollars, that it would have earned if there had been no price changes whatsoever. For example, if a firm had earned a "net income" before taxes of \$100,000 in year *X* during which no prices changed, and the price level was 100, stabilized earnings in the next year when the price level was 150, would be \$150,000 in current dollars. "Deflated" income is \$100,000, as in the previous period.

It is unlikely, however, that the timing and nature of a firm's receipts and disbursements would be such that no gain or loss in the value of money occurred in a period of fluctuating prices. It is also unrealistic to suppose that all prices move precisely the same extent during a period of price movements. Thus stabilized accounting does *not remove* the effects of fluctuating price levels from the accounts or financial reports drawn from the accounts. In fact a major contribution of stabilization would be to provide a measure of gains and losses resulting from changes in the value of money. Holding cash in a period of fluctuating price levels constitutes "speculation" in the value of money. Holding large amounts of money-value assets is likewise a "speculation." Incurring large amounts of money-value liabilities

is a "speculation" in the opposite direction from the first two situations. It is not implied that there is no circular flow of money-value assets and money-value liabilities. But the flow of receipts and disbursements is likely to be such that for a given income period, a firm has either a net investment position in money-value assets or in money-value liabilities. To the extent that a firm during an income period is "long" in net money-value assets, a rise in the general price level results in a loss of purchasing power. A gain in purchasing power is achieved through holding money-value liabilities during a period in which prices have risen. In a period of falling prices, the results are reversed.

Stabilizing also seeks to adjust the historical costs of physical assets to current price levels. However, this is *not equivalent* to presenting the current replacement costs of physical assets. At least two important causes of divergences between historical costs converted to "current dollars" and current replacement costs may be operative. First, the price levels of specific assets may not change in the same proportions as changes in the general price level. Second, changes in the general economic structure may cause the real values of assets to change.

In the first case, differential price flexibilities, reflecting differential price elasticities of demand and supply, would give rise to changes in relative prices. Changes in relative prices represent changes in relative values. In the second case, changes in the economic structure¹⁸ which would not have occurred with stable price levels give rise to changes in relative values. Changes in relative values, of course, are reflected in changed relative prices. It is generally not possible in specific cases to distinguish, from the effects, the nature of the cause or causes.

¹⁸ These changes may be differentiated from changes caused by price level changes.

PROBLEMS OF STABILIZING PROCEDURES

The foregoing considerations give rise to three practical questions: (1) How accurately does an index of the general level of prices measure changes in the general level of prices? (2) What is the extent of price dispersion during a movement in the general level of prices? (3) What is the extent of changes through time in the general economic structure which gives rise to price dispersion which would be obscured by the use of a general index of prices?

The practicality of stabilizing by the use of a general index of prices depends in considerable degree upon the nature of the answers to these questions. For example, if there are serious weaknesses in index number construction, or if there is great dispersion of prices during a movement in the general price level (for either of the two reasons cited above), stabilizing through use of an index of general prices would yield inaccurate results.

Sweeney's discussion of these problems is incomplete. While he considers the advantages and disadvantages of alternative measures of the general price level, in his book he does not indicate awareness of the problems of index number construction.¹⁹ However, inability to solve complex index number construction problems requires cautious and enlightened use of the resulting index.²⁰

Sweeney suggests that, despite the diversity of individual prices, "they all tend to move in the same direction at the same

time, although not at the same rate."²¹ This does not meet the issue of the extent of price dispersion. If all prices move in the same direction, but not at the same rate, there may be tremendous price dispersion. If there is great price dispersion, the use of a general index of prices for stabilization may result in gross inaccuracies in the stabilized accounts.

Empirical studies indicate that there is in fact considerable price dispersion during a general movement of prices.

A measure of price dispersion associated with cyclical price fluctuations is presented in Appendix 2 of the National Resources Committee's *Structure of the American Economy*.²² An index of depression sensitivity is computed for 784 items. The index is calculated by subtracting the 1932 price index of the specific commodity from the arithmetic average of the 1929 and 1937 price indexes. 1929 prices are used as the base of the indexes.²³ The findings reveal a range in indexes from -20.6 to 81.8 per cent.

Components of the wholesale price index (675 commodities) showed considerable dispersion during the post-war rise in the general price level. Data on the six months after termination of the Office of Price Administration have been analyzed by the Department of Commerce.²⁴ While the change for approximately two hundred commodities was limited to between +5 and +15 per cent, there was an appreciable range in the percentage change in wholesale price indexes of the remaining $\frac{2}{3}$ of the items. The difference between the change in the twenty-five commodities with the greatest positive change and the twenty-five commodities with the greatest

¹⁹ Sweeney, *op. cit.*, pp. 2-6. An earlier article by Sweeney qualified the generality of the use of indexes. Cf., "Approximation of Appraisal Values by Index Numbers," *Harvard Business Review*, October, 1934, especially pp. 112-13.

²⁰ For amplification, see F. C. Mills, *Statistical Methods* (New York: Henry Holt and Company, 1938), Chap. VI; Wesley C. Mitchell, *The Making and Using of Index Numbers*, Bureau of Labor Statistics, Bulletin 656 (Washington: U. S. Government Printing Office, 1921); W. A. Neiswanger, *Elementary Statistical Methods* (New York: The Macmillan Company, 1948), Chaps. XI, XII.

²¹ Sweeney, *op. cit.*, p. 17, footnote 14.

²² National Resources Committee, *Structure of the American Economy* (Washington: U. S. Government Printing Office, 1939).

²³ *Ibid.*, p. 187.

²⁴ L. J. Paradiso and L. H. Rodriguez, "The Current Structure of Prices," *Survey of Current Business*, March, 1947, p. 3.

negative change was over 100 per cent. Professor Mills' broader study presents similar results.²⁵

A "panoramic conspectus" of the dispersion in price trends in various markets and in different classes of commodities over a long time period is also presented by F. C. Mills.²⁶ While the price trends in various markets were substantially parallel in the pre-World War I period of twenty years, there was some dispersion of price trends of classes of commodities in this period. The greatest divergence was between the 43 per cent rise in the prices of raw producers' goods with only a 10 per cent rise in the prices of processed producers' goods. During the inter-war periods, considerable dispersion in price trends developed. For example, wholesale prices rose only 13 per cent while construction costs rose 70 per cent and hourly earnings in manufacturing industries rose 257 per cent. The index of prices of raw American farm products was the same at both terminal dates of the period, while the prices of processed consumers' goods rose 32 per cent and the prices of capital equipment and construction rose 39 per cent.

The empirical evidence demonstrates that there is considerable price dispersion associated with (1) cyclical price fluctuations, (2) price fluctuations associated with random (war-induced) disturbances, and (3) secular movements of prices. The assumption that a general price index will be appropriate in stabilizing the accounts of a specific company may be invalid. While there may be a high correlation between changes in prices as the general price level changes, there may be considerable dispersion in the changes of

individual prices. The nature of the commodities traded in by a specific firm or industry may make use of a general index of prices inappropriate for stabilization of the accounts of that firm.

THE USE OF SPECIAL PRICE INDEXES

In view of the possible inapplicability of general price indexes for stabilization purposes, the construction of special firm or special industry indexes has been recommended. It should be noted that generally advocates of the use of special indexes do not propose stabilization of all accounts. The objective of special indexes is to provide a measure of current replacement cost without resort to the frequently expensive and sometimes unreliable appraisal method.

Special indexes are appropriate to adjust for changes in the general economic structure, but not for changes in the general price level. For if changes in the general price level are acknowledged, it is inconsistent not to report gains or losses from changes in the purchasing power of funds received and disbursed by the firm.

It is difficult to appraise the effectiveness of special indexes in providing a measure of asset value changes since there is little empirical evidence on this specific point. Graham demonstrates a close parallel between public utility construction costs and a measure of the general price level.²⁷ Mancina mentions one example where the "reproduction cost value" of a plant was computed by the use of specialized index numbers and found to approximate the value estimate by the "field-inventory method."²⁸

On *a priori* grounds, there is considerable basis for doubting the effectiveness of special indexes in measuring asset values.

²⁵ F. C. Mills, "The Structure of Post-war Prices," National Bureau of Economic Research, Occasional Paper 27, July, 1948. See his Charts 2, 3, 4.

²⁶ F. C. Mills, "The Anatomy of Prices," National Bureau of Economic Research, Bulletin 80, September 9, 1940.

²⁷ W. J. Graham, *Public Utility Valuation* (Chicago: University of Chicago Press, 1934), pp. 22-24.

²⁸ A. Mancina, "Index Numbers and Public Utility Property Valuation," *Journal of Business*, April, 1938, p. 160.

In the first place, a host of index number problems must be dealt with. The vexing difficulty of changes in the quality and composition of component items is particularly serious. Second, a breakdown of unit costs may be needed. Frequently such information is not obtainable.²⁹

The third difficulty lies at the very basis of the theoretical presuppositions of the method. It is assumed that current replacement cost is identical with current value. When value exceeds reproduction costs, according to economic theory, under conditions of perfect competition additional units will be built. The output of the additional supply reduced the net return to all units; costs of producing additional units may rise. These two influences will finally result in the equality of value and reproduction cost. If reproduction costs exceed value, adjustments in the reverse direction will take place.

However, there may be sustained transition periods when there is divergence. Furthermore, value changes are more dynamic than cost changes. This differential fluidity will give rise to differences at a moment of time. Indivisibility of resources may make production of additional assets unfavorable, so that value is considerably above reproduction cost.³⁰

²⁹ Professor Graham has expressed the view that "it would not be difficult to construct" specialized cost indexes. ACCOUNTING REVIEW, January 1949, p. 22. Probably, the degree of difficulty would vary with specific situations. Additional factual information on this point would be necessary to permit generalization. Cf. Research Department, American Institute of Accountants, "An Inquiry into the Reliability of Index Numbers," *Journal of Accountancy*, April, 1949, pp. 312-19. In this writer's judgement the "Inquiry" is immoderately critical of the use of index numbers to approximate current values and costs. While caution should be exercised in the use of index numbers, their imperfections should not be exaggerated. For example, to ridicule index numbers for combining the prices of a non-homogeneous group of items indicates a lack of understanding of one of the basic achievements of the use of index numbers—to enable some limited information to be conveyed about the price behavior of a heterogeneous group.

Monopsonistic elements may result in a divergence between value and reproduction costs.

For the reasons cited above, therefore, reproduction costs computed by the use of specialized indexes may not provide a reliable measure of value of the asset. Index number construction difficulties may not be successfully solved, data for construction of indexes may not be procurable, and reproduction cost may diverge from value.

CONCLUSION

While this paper has stressed some conceptual and practical difficulties involved in the stabilizing procedure, this discussion *per se*, is neutral with regard to the issue of whether stabilization of accounts should be performed. That decision rests upon a comparison of costs of errors of ignoring price level fluctuations with costs incurred in attempting to make appropriate adjustments. However, if some modification in procedures is made because of changing values of money, consistency requires that all important income effects of fluctuating price levels be taken into consideration.

It should be observed further that fluctuating price levels give rise to a host of problems which are inevitably associated with the conduct of business operations in a changing and uncertain environment. Accounting procedures cannot be held to be the cause of difficulties which changing price levels may bring. Accountants may, however, aggravate the consequences or mitigate them. Consistent procedures and informed judgments are necessary to help business firms deal most effectively with the problems caused by a monetary unit whose value is unstable.

³⁰ Machlup, F., "Competition, Pliopoly, and Profit," *Economica* May, 1942, pp. 166-70.

THE TRADITIONAL VS. THE COST ACCOUNTING CONCEPT OF COST

L. J. BENNINGER

THROUGHOUT THE CENTURIES accounting has been shaped by its antecedents. Paciolo's stress on a record of receipts and disbursements and the determination of excess receipts over disbursements for a particular venture, though perhaps adequate to the needs of a rather simple economic society, has established a pattern which often runs at cross-purposes to the needs of modern large-scale enterprise.

At the bottom of many of the conventional and accepted "principles" of modern accounting can be found the roots of an admixture of Paciolo's receipts and expenditures concept and the aims of venture accounting. This is particularly true of "principles" relating to cost. The accountant measures cost, in the main, on the basis of expenditures made in terms of the purchasing power of the dollar at the time the expenditure was made. He has an inherent distrust of the use of hypothetical costs in the accounts. Although he has adopted the idea of accruals and deferrals, he has done so with many qualifications evident in today's accounting practice. Such qualifications smack of the venture accounting concept of a closed series of transactions, of a finished project, even though the very essence of accrual accounting is that of reporting the progress of a going concern.

Period or accrual accounting represented a revolution in the keeping of accounts. It recognized the continuity of modern business. It:

"... evolved to disassociate income from receipts, and expense from disbursements; revenue expenditures had to be distinguished from capital expenditures in order to permit long-lived assets, whose use was deferred, to be treated differently

in the calculation of current net profit from the treatment accorded to expenses which made their whole contribution currently. . . ."¹

The concept of period accounting represented progress in the keeping of accounts; however, capital expenditures have been narrowly conceived and revenue expenditures often ignore the concept of a going concern. Research and development costs, though often applying to income of subsequent fiscal periods, are commonly charged against the income of the period in which incurred. In the solution of current price-level problems, a portion of long-lived assets is charged immediately as a period cost in clear violation of the aims of period accounting. Use of a service is often a criterion for a revenue expenditure. Selling and administrative expenditures when incurred in connection with the efforts expended by individuals over a particular time period are considered revenue expenditures for that time period, even though those efforts may apply to earnings to be gained in subsequent fiscal periods. Payroll taxes, even though incurred in connection with manufacturing costs that are traced to product and deferred as a cost of periods in which the product is sold, are themselves often charged as general or administrative expenses of the period in which incurred. Thus traditionally-minded accountants revert unconsciously to a disbursements concept of cost.

The conventional accountant's attitude toward imputed costs emphasizes his tendency to adopt a disbursements or outlay concept of cost. The traditional ac-

¹ A. C. Littleton, "Value or Cost," *THE ACCOUNTING REVIEW*, September, 1935, p. 269.

countant would claim, for example, that imputed interest as a cost is purely hypothetical and arbitrary. One writer on the subject says:

"... interest on owned capital is not a cost in the sense that it represents an actual expenditure. It is merely a return which the owner would hope for if the capital were used in some other way. . . . Actual costs include only expenditures that must actually be made and hence when accounting costs for the determination of profit or loss on operations are being compiled, the cost of opportunities foregone has no place.³

If investment on owned capital is subdivided between those portions invested in machinery and equipment and inventories as contrasted to an investment in land, the traditional accountant would, furthermore, be unwilling to recognize implicit rent. Finally, he does not consistently recommend the inclusion of a charge among the operating accounts for proprietor's salary.

Thus the emphasis of traditional accounting revolves about sums of money paid out for goods and services in the accumulation of costs. It has accepted period accounting with reservations and interpreted it more or less as an extension and refinement of an expenditure concept of cost. Costs in this manner of thinking arise primarily in the process of the accountant's exercising his function of recording historical facts.

The cost accounting concept of cost represents a development from period costing to the matching of costs to products. This concept is today still in process of evolution. It does not reject the period concept of cost; rather, it seeks to modify such a concept in order to associate costs with product. It further extends the recognition that period accounting gave to the idea of a going concern. When carried to its logical conclusion, product costing

would allocate many expenditures now charged to current revenues to products to be sold in the future.

In commencing this discussion of cost accounting concepts of cost, it should be emphasized that although few accountants would object to the following generalizations, the word "reasonably" would be variously interpreted: "The revenues of a particular period should be charged with the costs which are reasonably associated with the product represented by such revenues."⁴ Consequently, this presentation of the cost accounting conception of cost should be construed in the light of the limitations of any generalization.

From the earliest beginnings of modern cost accounting, the word cost has been defined to include the whole cost. The book review section of *The Accountant*, July 12, 1890, would include as a cost of production: materials, labor, and indirect expense, the last comprising "... such items as management, office expenses, and interest on capital. . . ."⁵

Although Paton has not always taken the efforts of cost accountants seriously,⁶ he expresses, in the following, a line of thought commonly held by them:

"We are beginning to realize that accounting is concerned primarily with economic rather than the physical aspects of business activity, and that any and every cost factor which is economically necessary to the result—which must be incurred if activity is to continue—is a valid and significant element in the total cost accumulation and hence may properly be taken into account in the measurement of the cost of the inventory at any particular moment."⁷

Furthermore, Paton is justly critical of the accountant's traditional practice of

³ W. A. Paton and A. C. Littleton, *An Introduction to Corporate Accounting Standards* (American Accounting Association, 1940), p. 69.

⁴ "Engineering Costs Book-Keeping," by the book review editor of *The Accountant*, July 12, 1890, pp. 366-67.

⁵ Paton and Littleton, *op. cit.*, pp. 119-20.

⁶ W. A. Paton, "The Cost Approach to Inventories," *The Journal of Accountancy*, October, 1941, p. 300.

⁷ Walter B. McFarland, "The Economics of Business Costs," *THE ACCOUNTING REVIEW*, June, 1940, p. 198.

separating costs into "cost of goods sold" and "operating expenses." Such a classification of costs leads to the tracing of manufacturing costs of production to product but excludes from product selling and administrative costs. Paton believes this procedure has hindered the development of valid bases for income measurement.

A further expression of the cost accounting or total cost concept is given by Russell:

"Cost accounting . . . attempts to deal with total costs of product. It can and does report to management on this basis. It may be that . . . a substantial portion of the expenditures classified in financial accounting as selling, advertising, administrative, and general expense can be logically tied on to the product or service. It seems certain that period accounting is less impressive to the cost accountant than product accounting."⁷

As concerns the use of imputed costs in the accounts, cost accountants are not unanimous on the question, but, as a general rule, there is an attitude of open-mindedness and tolerance towards the idea. On the subject of imputed interest, Schlatter says:

"The writer, believing that the primary purpose of cost accounting is to aid management in controlling costs, is therefore, willing to include interest as a cost, *in those cases in which management would be aided*, but prefers to exclude it in those cases in which it does not seem necessary for good control."⁸

Scovell⁹ has expressed the view that there is no question as to the soundness in theory of imputed interest on investment; moreover, he has held that this theory is fully capable of being utilized in practice.

⁷ Donald M. Russell, "Applications of Generally Accepted Accounting Principles to Cost Accounting," N.A.C.A. Bulletin, August 15, 1948, Section I, p. 1542.

⁸ Charles F. Schlatter, *Cost Accounting* (New York: John Wiley and Sons, Inc., 1947), pp. 681-682.

⁹ Clinton H. Scovell, "Brief in Favor of Interest as a Cost," N.A.C.A. Yearbook, 1921, Proceedings of the Second International Cost Conference, Section III, p. 47.

Neuner¹⁰ argues that it is necessary to include interest on investment as a cost where a firm owns several plants, with varying investments in machinery and equipment, in order to compare properly the relative operating efficiency of each plant and the relative costs of manufacturing a variety of products.

Newlove and Garner¹¹ would utilize the "outlays incurred" concept of cost for balance sheet purposes, but would use the "sacrifices made" concept for purposes of determining the cost of producing assets.

A word of caution should be expressed in connection with the use of the word "sacrifice" made in the foregoing paragraph. It should be applied to the definition of what accountants mean when they use the term interest on investment. The word "sacrifice" does not refer to any subjective cost of abstinence. It represents merely the gain that would have accrued to the function. Remaining to be included in the accountant's profits would be a differential between that which could be earned by investment in comparatively safe securities wherein the owner has a creditor relationship to a potential user of his capital and that which could be earned by direct participation in an enterprise as an owner or investor.

Newlove and Garner would utilize imputed interest on plant investment in the factory accounts much the same as is done by Schlatter and others, but, in connection with inventories, would adjust manufacturing costs to delete from them imputed interest on plant investment.

On the matter of imputed costs, therefore, some cost accountants recognize the desirability of the use of such costs in the factory accounts. In the face of re-

¹⁰ John J. W. Neuner, *Cost Accounting: Principles and Practice*, rev. ed. (Chicago: Richard D. Irwin, Inc., 1942), p. 279.

¹¹ George Hillis Newlove and S. Paul Garner, *Elementary Cost Accounting* (Boston: D. C. Heath and Company, 1941), p. 386.

sistance from financial accountants, in practice, they have, however, swum with the tide as regards inclusion of such costs in the general books of account: "In general accounting practice has gradually crystallized against the inclusion of imputed interest on the books."¹³ Such costs continue to be utilized, however, for special cost studies outside the regular books of account.

One more aspect of cost needs to be considered here, that is, whether the costs utilized on the books will be carried in terms of the original outlay or in terms of current cost. Within the past few years a vociferous minority movement throughout the accounting profession has argued that if the real cost of production to the business is to be accounted for, costs must be recorded in terms of current dollars. This minority cannot be typed technically as cost accountants. However, since the movement is concerned with a development paralleling the aim of cost accounting in rendering accounting data in comparable form, it is included in this discussion.

Those who hold a brief for current costs would claim that costs should represent releases of economic values or losses of things, and that if original costs are utilized in the accounts in a rising price period, for example, assets and costs will be measured by an unreliable yardstick, a dollar which changes in purchasing power, and that costs expressed in terms of dollars incurred at one stage of the business cycle will not adequately measure the costs incurred in another. On this subject, Blackie argues:

"It would, furthermore, seem to be in conformity with the direction of accounting evolution to move away from a greater degree of personal judgment based on subjective factors (such as costs artfully constructed by the addition of monetary

amounts having different values at different times according to the peculiarly internal design or accident of their incidence) towards a lesser degree of personal judgment based on more objective factors (such as market replacement costs constructed by the addition of monetary amounts having the same value as of the same time and a 'free' relationship to each other according to the more external circumstances of that one time)."¹⁴

The majority attitude in accounting circles (it is yet too early to determine the attitude of the cost accounting segment of the profession) may be expressed in Kendrick's approval of a statement on cost previously made by the Executive Committee of the American Accounting Association. He sanctions that statement when he writes:

"... the use of original cost is most desirable in the determination of periodic net income, and such costs will be supplemented by other values only outside the accounts when used for other purposes; ..."¹⁵

The attempt on the part of some accountants to associate the word value with accounting costs expressed in terms of current costs has brought forth a flood of criticism from traditional elements in the profession. Scott, for example, has often expressed the thought that accounting is a process of valuation. In reply the answer typically has been:

"It is true that we do not hesitate to use the cost price in the accounting records, but this is not analogous to considering that value as *value*. The price is an ascertained fact, an expenditure, a closed transaction; it calls for a *tentative* record, but what will happen next to the article, what its value will prove to be remains to be seen. The record is not intended to represent value, but cost-outlay—an item in suspense, so to speak. Accounting records, from the very nature of the case, cannot record value."¹⁶

¹³ William Blackie, "What Is Accounting Accounting For—Now," N.A.C.A. *Bulletin*, July 1, 1948, Section I, p. 1373.

¹⁴ H. W. Kendrick, "The Relationship of Cost Accounting to Income Determination," *THE ACCOUNTING REVIEW*, January, 1948, p. 39.

¹⁵ A. C. Littleton, editor, "What Is Appreciation," *THE ACCOUNTING REVIEW*, March, 1930, p. 6.

¹⁶ Theodore Lang, editor, *Cost Accountant's Handbook* (New York: The Ronald Press Company, 1944), p. 901.

Accountants have argued pro and con on the question of value for years, and these arguments will not be repeated here. In the subjective sense of the word value, it is apparent that the accountant can never utilize such a value in the accounts. The accountant who favors the use of current costs in the accounts is interested in value from the point of view of value in exchange—not the value in exchange of, for example, finished commodities to be sold, but the value in exchange of the various goods and services constituting his cost. If he can obtain the current costs of his production and his assets, these are significant for purposes of income determination and asset evaluation. When he embodies such costs in assets, he may or may not apply the word value to them, but when applied he means no more and no less than costs in terms of the current competitive market.

Individual cost accountants may not espouse the concepts of total costs, imputed costs, and current costs reviewed in this article. They may not conceive of accounting as a process of valuation. The philosophy of cost accountants in general tends towards the ascertainment of full product costs computed in statistically comparable terms. Should such a philosophy become fully accepted within the realm of "gen-

erally accepted accounting principles," it would represent such an extensive change in commonly held concepts and methods of attaining accounting results so as to constitute literally a revolution.

SUMMARY

The traditional accounting concept of cost has to do with cost in terms of monetary outlays. Although accounting has accepted accrual or period accounting, it has not consistently followed the tenets of the accrual theory; also, it has largely rejected in theory and practice imputed costs and the theory that costs should be measured in terms of the current purchasing power of the dollar.

The cost accounting concept of cost is one still in process of evolution. Its stress appears to be on the statistical comparableness of accounts; consequently, its interest centers on total costs of product on a unit basis rather than period costs. The logic of the cost accounting movement would seem to embrace not only imputed costs, but costs measured by the purchasing power of current dollars. However, although such logic has been expressed in cost accounting theory, it has not been applied, to any great extent, in the practice of cost accounting.

A PATTERN FOR PROFESSIONAL BUSINESS EDUCATION¹

GEORGE W. ROBBINS

THE PREPARATION of young people for careers in business has become one of the major tasks of universities and colleges in the United States during the past two or three decades, judging from the standpoint of enrolment in business colleges and schools. Yet the preoccupation of business educators with the problems of curriculum has not kept pace with the growth in enrolment nor with the expanding responsibility of collegiate schools for the preparation of potential leaders in the study and management of economic affairs in our complex society. As an institution, the university is conservative of the vital traditions of the culture as well as provocative in the critical analysis of these traditions. But in the new field of business education, too little attention has been paid to defining its place in university education; and too much reliance has been placed, on the one hand, on the liberal arts traditions, while overemphasizing, on the other, the strictly vocational preparation of students. These two directions are not compatible, but they are manifest in our curricula. Among these reasons, two stand out prominently: first, the schizogenesis of business schools out of liberal arts departments of economics; and secondly, the pressure of community demand for "practical" courses that will advance the students' qualifications for immediate employment upon graduation.

THE OBJECTIVES OF PROFESSIONAL BUSINESS EDUCATION

The basic need in business education is for the development of a rational curricula

pattern which relates directly to the objectives and functions that a university professional school should embrace. These goals must be defined in terms of the environment in which the graduates will practice rather than in terms of the available teaching talent, or the background, experience and prejudgments of these teachers, or of some vague compromise with the concepts of liberal education. But the environment in which business men practice is not simple or formalized, as is that of physicians and lawyers. It is complex, varied, and mobile. In fact, unlike the recognized professions, business enterprise management needs persons of nearly all grades of intelligence, aptitude, and ability. Curricula may properly be designed to prepare students with different aptitudes for the several levels of occupational need. Business training is done extensively in high schools, trade schools, junior colleges, and in all types of business firms, as well as in universities.

The special task of the professional business school in the university is of concern to us here. This type of school differs in several fundamental ways from all others. Its environment is one of scholarship, and of breadth of intellectual interest. It is an integral part of a community of academic and professional schools. It has the resources of a large library. If it has a unique function among business schools, it must be to embrace the task of educating for the very highest level of management and executive responsibility where the problems raised require the greatest intellectual challenge and the fullest development of personality structure. The specific objectives of the professional business school must include these three: (1) The preparation of stu-

¹ This paper was presented at the December, 1948, meeting of the Pacific Coast Economic Association.

dents for roles of leadership in economic enterprise, whether it be small or large, public, private, or associational. (2) The development of scholars, teachers, and researchers whose special interest and competence will lie in the area of problems relating to the individual firm and business policy as opposed to public policy. (3) The conduct of research that advances the arts and sciences of business management.

In short, the business school's primary interest is in preparing for careers in *operating the economy* rather than for those concerned merely with *how it operates*, i.e., in the preparation of people for the tasks of decision making in the problems of operating the firm. It must be emphasized that the business executive requires training in both these areas, and particularly in the significant synthesis of economic principle and business policy.

A careful distinction must be made between education for jobs that require difficult vocational or occupational skills, and education for positions that require the most difficult intellectual accomplishment and sophisticated personality structure. One may train an accounting specialist, or a marketing research specialist, or a personnel technician (in all of which cases the technical skill required is prodigious), without paying much attention to economic principles, or without the benefit of a university background or environment. But a profession is characterized by a practice which involves a rigorous application of some branch of science or higher learning. It is clearly a waste of university resources as well as of the talent of qualified students to equip them with a highly vocationalized skill at the expense of a rigorous preparation for the making of leadership decisions; yet the temptation to move in this direction is great.

It may be argued that it is not possible to equip young people with anything else but occupational skills, and that even if

it were, it would still be best to emphasize practical skills for two reasons: (1) because there is a better market for graduates who can do something to earn their salt; and (2) because it is unrealistic to equip students with assets that will very likely depreciate, become obsolete, or disappear completely before they are called into use. If the first point be true, it is quite inappropriate to have business education in universities, not only because the cost is relatively high, but more particularly because trade schools and business firms themselves should be able to do the job more effectively.

The presence of an active market for skilled college graduates who know how to keep a set of books, to sell goods, to take inventory, to make a time study, to execute trades on the exchanges, or to construct a market survey questionnaire is a real, but unfortunate stimulant to the proliferation of technical-skill courses in the business school curriculum. It is unfortunate, because the real functions of the professional business school are not served by a curriculum (however good it may be) that is bent on training people for better jobs upon graduation, or that emphasizes specialization for specialization's sake. Unless the professional schools in the universities embrace the task of training for eventual leadership in the decision-making segments of our economic organizations the job will not be done. We will be forced to conclude either that it is impossible of accomplishment, or that we must continue to live in a society where the thousands of daily diagnoses of business problems and their prescription are left to persons who are undisciplined for their tasks save by fortuitous occasional circumstances. With the rapidly mounting complexity of modern business and economic life, and in view of the ominous presence of enemies of personal freedom and voluntary action, it is to be doubted that time is on the side of delay in per-

fecting professional training for the kind of business executive leadership that alone can minimize the damaging effects of muddling action.

The argument that college education for executive leadership is misplaced because graduates will not be executives for many years, reveals grave misunderstanding of the possibilities and purposes of professional education. The argument is usually accompanied by the statement that a graduate's greatest need is to eat. But if a college man were to be assured of eating well today, he would be taught the plastering trade; and if there is a college course in plastering, he would be well advised to avoid it in favor of apprenticeship.

Clearly, professional education is education for a career, not a job. It is preparation for a life's work in which the urge for proficiency and competent performance of vital economic functions takes precedence over personal aggrandizement in the mind of the practitioner. One does not have to claim that business management is a profession in order to posit that a professional type of business education is needed or useful for the qualified candidates. It is probably true that there is no truly professional field in business. It may be proved that men untutored in business and economics become successful and even revered business leaders; but that fact may be a tribute to their great personal powers or a sad reflection on the low intellectual standards under which such affairs have been conducted. It may even be argued that formal and tight professional organization any place in the business world is dangerous because the entrances and ladders of advancement must be kept open to all who can demonstrate by performance.³

³ The ideas expressed in this paragraph are most excellently put by Robert D. Calkins, "A Challenge to Business Education," XXIII, *Harvard Business Review* 2, 174-86.

Be that as it may, the argument here is not for professions in business, but for the recognition of the urgent need for a professional approach in the curriculum building for university business schools.

THE NEED FOR SELECTIVITY IN ADMISSIONS

In professional business education we are concerned with only a relatively few students in fact, but large numbers in potential. In 1940, four-year college graduates accounted for only 4.4% of the entire adult population of the nation.³ Of this small group, less than 10% were business school graduates. But in contrast to these small numbers, nearly 40% of the college graduates in 1940 went into business.⁴

This is not an argument for a vast increase in university business education. Although we may need more business schools of this type, it would seem to be most appropriate that the actual enrolments in present schools be decreased and that the students be recruited and accepted on a much more selective basis. Our present schools are seriously overcrowded, classes are too large, teaching loads too heavy, faculties are unavailable, and physical facilities inappropriate to the kinds of teaching method needed. But, equally important, it is not the numbers but the quality of business leadership that is significant at this point. And even though numbers were vital, it must be recognized that the development and perfection of rigorous professional curricula should precede, not follow, its application to large numbers of students; and there is little likelihood that significant improvements can be made in the face of staggering enrolments that prevail now.

If we are to increase the attention paid to the recruitment and selection of students on the basis of aptitudes for suc-

³ J. Frederic Dewhurst & Associates, *America's Needs and Resources* (New York: The Twentieth Century Fund, 1947), p. 301.

⁴ Robert D. Calkins, *Op. cit.*, p. 180.

cessful management leaders, business scholars and researchers, and teachers, we must first discover what these attributes are and secondly, devise measurements of them in the undergraduate candidates for admission.

Schools of business generally follow one of two methods in selection at present. A small number of schools admit on the basis of a formal application which provides, in addition to biographical data and previous scholarship records, answers to questions of a general nature from which the school may determine or guess certain attributes. A larger number of schools admit any person who qualifies for entrance to the university. If the information obtained by the first of these methods is adequate and is carefully used, it is preferable and more efficient from the standpoint of the resources of both the university and the student. The second method seems less efficient, because many unqualified students are attracted to business education because of its seeming practicality; and yet they may never be sorted out and redirected. My experience of many years and many hundreds of cases of reinstatement leads me to conclude that most failures come from causes that have little to do with aptitude for business, and that many who do not fail should have been redirected before they got a business degree. The latter may be true because our business course is not sufficiently effective as a screening agent, particularly in the first, or junior year.

But in either case, there is at present too little objective measurement of qualifications for ultimate success in the types of careers for which the schools educate, and too little attempt to relate the curricula to these qualifications and their development. It is true that the attributes and factors which make for this success are much more difficult to define and measure than are those for lesser kinds of business

activity. We must work on the basis of untested hypotheses. And, because a curriculum is a ponderous and static affair, good results from selection, in terms of final scholarship averages, may only mean that we have picked good people for the type of course we offer. Good results of this kind do not mean that the course itself bears any realistic connection with the careers for which it was devised.

The problem is further complicated by the manifold functions, as stated above, of training for management careers and for scholars and researchers. Recognition in any admissions program must be given to the varied aptitudes and characteristics for these different pursuits.

Nevertheless, a statement of hypothesis is better than an inarticulate premise that any college student may make a good business school student. Perhaps we may begin with the hypothesis that these attributes are needed: (1) leadership ability, to be judged from biographical data and personal interview; (2) emotional stability, measured by interview and perhaps psychological tests; (3) intellectual capacity, as shown by previous grades and psychological tests; and (4) range of interest and imagination, as revealed in interviews, tests, and experience patterns.

The recent work of the Committee on Human Relations in Industry in Chicago holds some encouragement in revealing personality characteristics that are common to successful top executives.⁵ Because there is some evidence that these characteristics may not undergo significant change in the adult, it may be possible to test for their presence in upper division students.

Among the personality characteristics listed by William E. Henry from the Committee's studies are the following:

⁵ William E. Henry, *Executive Personality and Job Success*, American Management Association Personnel Series No. 120.

1. Achievement desires—a high drive and achievement desire, and stimulation from the pleasure of immediate accomplishment.
2. Mobility drive—a necessity for continual upward climb in achievement.
3. The idea of authority—a concept of authority in positive terms of helpfulness in relations with superiors and subordinates rather than in terms of self.
4. A feeling for organization—the ability to see and define relationships in isolated factors.
5. Decisiveness—the ability to come to a conclusive decision.
6. Strong self structure—a well-defined conception of themselves.
7. Aggressive—essentially active and striving.
8. Apprehensive—fear of failure to accomplish the things desired.
9. Strong reality orientation—ability to see practical implications.
10. Interpersonal relationships—self identification with superiors rather than with subordinates.
11. Identification with own parents—detached and objective attitude with more positive tie with father than with mother.

Although the results of these tests appear to be tentative and somewhat narrow in their application to all types of business leadership, they may point the way to measurement of aptitudes in young people seeking admission to our schools, and may, in addition, suggest to us the desirability of constructing curricula and teaching method which will develop and enhance these inherent qualities in our properly-chosen students. The studies of Bossard and Dewhurst lend further credence to the proposition that business students should be selected and trained carefully on the basis of significant personality traits as well as scholarship.⁶

THE ACADEMIC LEVEL OF PROFESSIONAL WORK

The integration of a school of business administration in the university depends,

then, on the definition of objective. The level at which the professional work is undertaken must be the function of clearly defined hypotheses in the absence of empirical evidence. In terms of the objectives that have been suggested above, it may be stated as an hypothesis that the general qualifications for students should include these four: (1) high intellectual capacity; (2) mental and emotional maturity; (3) a rigorous preparation in terms of general education and particularly in terms of the social sciences which form the basis for a large part of business executive action, and (4) executive personality potential.

These qualifications, particularly the first three, suggest that selection of students take place no earlier than at the beginning of the third college year. Specifications for the type of student we want may be written for the benefit of our colleagues whose responsibility it is to provide lower division curricula of a general educational nature; but it is clear that this task of education belongs to others, not to the specialists in business education whose problems are already overtaxing. A good lower-division preparation should accomplish for business students certain things, including the following: (1) provide interest in and facility with the language and its wealth in literature; (2) enhance and sharpen the tools of mathematics and quantitative measurement; (3) furnish a background of scientific methodology as applied to the physical, biological, and social sciences, with special emphasis on the latter, and (4) enlarge the capacity for sound living by presenting the story of man's moral, cultural, and historical development.

This proposal, of course, argues against the beginning of professional business work in the freshman and sophomore years, excepting for the introductory course in accounting which may claim a rightful place in the sophomore year not

⁶ James H. S. Bossard and J. Frederic Dewhurst, *University Education for Business* (Philadelphia: University of Pennsylvania Press, 1931), Chap. III.

only as a testing ground for interest in business but also as an integral part of a good general education program. Inclusion in the lower division of such courses as advertising, cost accounting, investments, and personnel management is of questionable validity for two reasons. In the first place, they inevitably crowd out the necessary preparatory courses which must be looked to for the accomplishment of the things just enumerated. This is not only true in point of time-study list relationship but more particularly in point of student interest which reflects immaturity at that stage of development. And secondly, specialized business courses in the lower division cannot possibly receive professional treatment when the classes are populated by immature students without either the proper seriousness of purpose or the basic intellectual tools with which to grapple with the problems raised. For example, a university course in Investments presupposes a facility with accounting, statistics, mathematics of finance, business finance principles, business cycles, and economic theory, among other things. A lower division course in investments cannot possibly come to grips with the significant subject matter in that field, and must therefore be largely descriptive on an impractical, elementary plane.

The proposal for an upper division and graduate school does not necessarily argue against the purely graduate treatment of business education. The success of the few graduate, or post-graduate business schools is impressive and further experience may prove the desirability of this approach. But, for most universities at the present time, the limitation of professional business education to the graduate level would prove entirely too expensive. Moreover, the business community is not yet sufficiently convinced of the value of business education to make the risks of graduate business schools feasible from the standpoint of most universities and most stu-

dents. It may be true, however, that leadership in business education of the kind we discuss here will remain in the hands of the well-endowed and financed graduate schools.

On the other hand, the three-year, upper division and graduate program has the great advantage of providing a more thorough and rigorous curriculum, and of offering a flexible and efficient means of sorting out, at the baccalaureate level, the students who have outstanding capabilities for advanced work and independent investigation.

But there is another compelling reason for the three-year schedule which bears on the relationship of the business school with other parts of the university. A business school should have varying, but vital contributions to make and to receive from other schools as suggested below:

1. the law school, in the areas of industrial relations, marketing, finance, accounting, and social control.
2. the engineering school, in the areas of industrial management, marketing, and personnel management.
3. the medical school, in hospital administration
4. the journalism school, in marketing
5. the liberal arts college, in accounting, finance, and marketing.

This list is not complete, but may be suggestive of a pattern that will enrich the business school. The close relationship of the department of economics in the liberal arts college to the business school is unfortunately too often minimized. Psychologists, sociologists, and political scientists can make real contributions.

Departmentalization is one of the vulnerable points of the modern university, because it tends to segregate the professions from the sciences on which they must be based. It also tends to make as the end of all teaching, the production of specialists who view their specialty as an end in itself. It is for this main reason that departmentalization of marketing, ac-

counting, etc., within the business school itself should be resisted.

A business school that is organized on the three-year basis seems to be most ideally suited to promote the kind of cross-fertilization that is implicit in these remarks.

THREE-YEAR UPPER DIVISION AND GRADUATE PROGRAM

The three-year program may be thought of as an integral unit with a respectable exit point at the end of the senior year with the bachelor's degree, and the more typical completion point with the master's degree at the end of the fifth college year.

The total program may be likened to a pyramid whose foundation is the first one and one-half years. If the content of an efficient curriculum is to be rationalized on the basis of hypotheses as suggested, there is little room, and indeed little argument, for indiscriminate selection of courses by students. First things should come first, and others in a reasonable sequence, allowing only the flexibility of individual program arrangement that will be demanded for the extraordinary student.

The first one and one-half years may properly be devoted to a two-part foundation. First, the analytical tools of management must be developed and made useful. These include managerial accounting and control accounting, statistics, economics of the individual firm, business law and social control, and perhaps communication. Secondly, the major functional management areas are introduced descriptively and comprehensively with emphasis on characterization of methodology employed in successful problem solution. These areas include industrial production, marketing, finance, personnel management, and accounting and control.

With this foundation assumed on the part of all students, the second half of the

curriculum embraces (1) specialization, and (2) synthesis. Provision may be made for a maximum specialization of from five to eight courses in any one of several areas of specialization, such as marketing, finance, personnel management, industrial management, accounting, statistics, insurance, transportation and traffic management, and real estate and land economics.

The courses in each specialization might well be arranged so that each student is certain to have a fairly well-rounded background in the general area. This point deserves considerable emphasis inasmuch as the student's choice of a major is so often unrelated to his later opportunity for career specialization. But more than this, the school's function is not to present to the business world a full-fledged expert, but a person who is capable of tackling an involved business situation, of defining its problems, and of employing methods of analysis that are likely to provide the most satisfactory solutions. Perhaps even more significant, the graduate is to have the foundation on which to build his own intellectual mastery of technical procedures, either through independent study and experience or through the facilities of university extension services. If, over the years, the keenest students of business are not our own graduates of former years, then we have to justify our programs on some esoteric ground. A famous medical scientist and surgeon once stated that he did not learn anything about medicine in medical school (and he meant it as a great compliment to the school), yet he owes his success largely to the foundation he gained there. What he was saying was that his school did not make him a professional man, but it provided him the foundation on which he could become one. It is this type of approach to our problem that seems most likely to achieve the desired results.

In addition to specialization, the last half of the curriculum leading to the master's degree may properly be devoted to synthesis. It is true, of course, that the bringing together of related parts of the curriculum takes place at every level; indeed, it may be important to see to it that this type of teaching is done. The elementary accounting course becomes mere bookkeeping technique without broad functional reference. But there remains a need, at the top level of the curriculum for a conscious application of synthesis from the point of view of top management. The course may be called Business Policy, or Top Management Organization and Policy. Its function is to tackle the broadest and most fundamental types of problems with which top management is confronted typically, and to develop the methodology of solution. The theory and problems of organization may be included at this level rather than earlier; for it is not likely that a more than superficial treatment of the subject can be expected until the students have acquired the sophistication implicit in the first half of the proposed curriculum.

TEACHING METHODS AND THE CURRICULUM

No curriculum has much significance apart from the teaching that is done within it; and it is, therefore, of vital importance that teaching methods be adapted to the spirit and requirements of the program proposed. It is a temptation to be dogmatic about teaching methods excepting for the rare professor who is equally skilled in a variety of them; but certain propositions may be ventured.

For the business school graduate who is to aspire to managerial positions, it is an essential requirement that he be able to work with others, to operate in an authority-system (often rather formal and sometimes formidable), to act decisively with respect to others, to gain acceptance of

his wishes, and to express his aggressiveness creatively in his relations with other people. What teaching methods are there for pointing up these inherent qualities in students? Although the answer may be obscure, it seems certain that the method must involve small groups, or at least sub-groups of students with a minimum of domination and a maximum of deft faculty leadership to promote group effort. The typical seminar does not suffice on this score since it seldom focuses on *group* effort. Laboratory experiences where small groups collaborate, as in the preparation and testing of a survey questionnaire, may offer some hope, providing the teacher is conscious of the need for controlling the selection of the group leaders.

The lecture method may have become a permanent and universal answer to the prayer of budget-bedecked administrators particularly in view of its supine acceptance by most business school faculties, but it is not necessarily compatible with all the needs of business education. To be sure, there may be certain courses in which the lecture technique is superior; indeed, the large class is likely to stimulate good teaching, for who would face three hundred students without careful thought of what is to be said and how! Moreover, the good lecturer can efficiently make alive many ideas that lie obscured in a book, or even in an informal discussion. But the lecture method is subject to abuse, is habit-forming, and does not provide the informality that is essential to the development of important traits in students of business management.

The case method requires no extended comment here; but it may be noted that when in the hands of an imaginative and conscientious instructor, it has an important place in the curriculum. In fact, it is so important that I should like to see a substantial budget available in every business school for the collection and pub-

lication of case material. The significance of cases lies in the opportunity for the student to be confronted with a large number of actual situations in the solution of which he must rely upon the principles to which most of his course work is devoted, often necessarily abstractly.

Finally, a most important teaching challenge lies in the development of fresh syllabi and the abandonment of reliance on the standardized textbooks, many of which, in the advanced courses at least, are prepared for course work at a somewhat lower level. If university professional schools have a unique place in business education they must also have unique courses that dare to experiment with novel approaches to the stimulating problem of developing the mind and personality of the student. In upper-division courses, if one relies heavily on textbooks that are being used successfully in junior colleges and trade schools, this is *prima facie* evidence that the course is out of step with the purposes of the school.

SPECIAL PROBLEMS OF THE ACCOUNTING CURRICULUM

Accounting educators and accounting courses meet a notable challenge in the type of curriculum suggested here. They are especially responsible, at the elementary and intermediate levels, for introducing the concept of the business entity, for interpreting the principles of economics realistically in terms of the business unit, for promoting in the student the good habit of quantitative thinking, and for explaining the theory of accounts on which depends a large part of business-data recording, reporting, and interpretation. So important are these matters of orientation that the beginning accounting courses should command our best teaching.

At the upper-division level, accounting courses should contribute to all students

a more thorough understanding of the premises on which business data are recorded and of the uses and limitations of accounting reports in the analysis and control of business situations. Business executives must know the origins, uses and limitations of accounting information, but they need not be experts in the recording and preparation of this information. It is particularly important that they understand the concepts of cost and the significance of cost reports and cost controls. The major challenge to accounting educators may well be the devising of advanced courses which emphasize the subject of managerial controls as opposed to the mastery of accounting technique *per se*. One of the problems in curriculum building is to see to it that students who are studying the problems of control have a sufficient background in the several management areas to enable them to understand why these controls are necessary; i.e., to understand the objectives and needs for control as opposed to the technique of it. For the objectives and needs are not necessarily apparent in the subject matter of accounting; they arise, instead, from an understanding of the functional problems of management in marketing, finance, production, and personnel.

The challenge lies in the fact that the traditional advanced courses in accounting are designed primarily as stepping-stones in the path of accounting specialism rather than as integral parts of a broader professional curriculum in management. As such, they are likely to emphasize the techniques of accounting as ends in themselves instead of the principles of control as means to the end of better management of the marketing, production, finance, or personnel functions. Perhaps some of the difficulty of the accountants in devising proper courses stems from the absence of clear definition by the rest of us of the

substance we would like to expect of advanced accounting courses.

Not the least of the accountant's problems is the reconciliation in his courses of the objective of general preparation in managerial control for all students with that of preparing accounting majors for the narrow specialism of public accounting as expressed in the CPA requirements. From the standpoint of the broad professional business curriculum herein advocated, the presence of the CPA designation is not necessarily salutary, since it is likely to exert an influence on the accounting curriculum that is not warranted in fact. Certainly, education for leadership in the area of enterprise accounting, controllership, and managerial accounting is even more important, quantitatively, than is education for public accounting. Yet the strong lure of public accounting is more and more evidenced in the shaping of collegiate accounting courses. And it is by no means clear that these courses are equally well suited to the preparation of accountants who have no future interest in public accounting.

This matter presses for full consideration. In recent years there has been considerable discussion of the desirability of setting up separate schools of accountancy.⁷ So long as the CPA examinations represent a narrow specialization, as at present (and this does not refer to their difficulty and technical adequacy), it is quite likely that separate schools would be successful; but they would hardly contribute much to the elevation of the professional standards in public accounting. The fact is that the present low standards for general education, not to mention business education, of the CPA laws makes it entirely

possible for persons to pass the examinations without the benefit of post-high-school education and with only the helping hand of coaching schools.

If these standards are to continue, then one must conclude that, on the whole, an accounting school may and should operate outside the traditional intellectual environment of the university. For it should not be the objective of a university professional school to train for a narrow specialization standard fixed by some outside agency; but rather, it must educate on a plane that will serve as a constant challenge to the standards of the practicing group. It seems quite likely, however, that the CPA standards will be broadened in the years to come to test more substantively in the various areas of business management other than accounting and control; because the responsibilities of the truly professional public accountant do not permit him to eliminate from his professional training any one of the curriculum elements which have been defined above. His chief responsibility may become more and more that of adapting his technical facilities to the efficient service of sound management policy formation. If this does happen, then the educational pattern of the professional business school will become increasingly significant, and the pressure for separate accounting schools will disappear. The public accountant, like the medical specialist, will find that his basic education belongs in the professional school and his specialization to post-graduate internship practice and study.

In all our planning for curricula, we have to recognize that the university professional school has a unique place in the hierarchy of education. If it is not to be at the top, it ceases to justify its place in the university. At the same time, we have to recognize that the constant enlargement of the body of technological

⁷ See Ernest J. McLuckie, "Education for Public Accountancy," *The Journal of Accountancy*, September, 1944, pp. 215-17; and Reports of the Committee on Education of the New York State Society of Certified Public Accountants, May 22, 1947.

information and theory places on the faculty a heavy burden of discrimination in the selection and more skillful use of the educational resources and tools at our disposal; for the time available for teaching cannot be lengthened indefinitely.

The mind of the professional student is his only real tool; and it is our function to prepare this mind, not as a depository of huge accumulations of facts, but as a sharp, flexible instrument to mold the achievement of his responsibility to the community. The true function of specialization in accounting, as in any other field, and the true obligation of professional education is not to create in the mind of the student a storehouse of the past, nor is it to provide that mind with bits of experience and proficiency in every conceivable future occupational situation. On the contrary, it is to prepare the mind for the

unknown by fostering openmindedness, imagination, discrimination, and the love of inquiry. These things are accomplished, in the final analysis, by good teaching rather than by more courses at the static level of proficiency; by emphasis in the curriculum on the development of the student's capacity for self education and self expression, and not on a proliferation of subject matter. These wholesome results obtain when the excellence of our teaching is measured, not in inverse proportion to the number of courses and students (as I fear it is), but in direct proportion to these numbers. When our schools provide opportunity for individual investigation, measured in terms of the scientific method, and for active intellectual initiative that alone creates the foundation for self-sustained, lifelong learning, they become professional in fact.

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ACCOUNTING IN THE PROFESSIONAL BUSINESS CURRICULUM¹

DONALD J. EMBLEN

A RECENT ARTICLE appeared in the *Wall Street Journal* captioned, "Businessmen, Professors Disagree on Subjects Best for Commerce Career, But No One Favors 'Vocational' College."² The occasion for this article was the publication of a study made by the Society for the Advancement of Management concerning the courses businessmen and college professors considered essential for a well-rounded education for business. It was not surprising that businessmen and professors were unable to agree in all cases, as educators themselves find numerous areas of disagreement concerning curricula content.

The results of this study are interesting because of the emphasis given to the study of accounting as a preparation for business. Of more significance, however, was the recognition given to the so-called cultural courses of study. The courses businessmen think would give the student a well-rounded preparation for a business career were listed in the following order:

English composition	ment
English literature	History of industrial
Public speaking	development
General accounting	Advertising
Business organization	Distribution methods
Government and business	Budgetary control
Labor relations and laws	Taxation
Government	Marketing research
Corporation finance	General chemistry
Cost accounting	Algebra
Production methods	Geometry
Principles of management	Calculus
	Industrial psychology
	Personnel selection

Not all the 500 college teachers contacted during the course of the study were in agreement with the businessmen concerning the relative importance of the above list of courses. Only in four fields of study were both groups in substantial agreement—English composition, literature and public speaking, as one field, the remaining fields being economics, general accounting, and industrial and business organizations.

It should be recognized that the courses of study outlined above were suggested as preparation for a general business background. The task of developing an adequate curriculum is relatively easy when specialization in some field is not taken into consideration. By introducing a field of specialization, such as accounting, the problem of curriculum building becomes more difficult when the basic needs of the students are adequately recognized. It is easy enough to set up a variety of accounting courses and say, "Here they are, take these courses and you are an accounting major." However, it is not easy to outline a program that will maintain the proper balance between the general background courses and technical courses.

The demands placed upon accountants today are such that a thorough technical training plus a broad general background are essential for success in this area of work. This is particularly true in the field of public accounting. Commenting on the background considered essential for a public accountant, Edward B. Wilcox writing in the *ACCOUNTING REVIEW* stated that, "The public accountant should know economics and finance, insurance, manufacturing, and trade practices in

¹ This paper was presented at the December, 1948, meeting of the Pacific Coast Economic Association.

² November 3, 1948.

many fields. He will find use for an understanding of the physical sciences, and even of the arts, geography, history, and literature."³

Considerable variation exists among schools of business relative to the proper balance existing between general courses and business courses required of their students. However, the general educational philosophy behind the different requirements appears to be similar even though specific course requirements vary. Keeping in mind the demands placed upon professional accountants in the course of their work, it would appear that not much more than one half of an undergraduate program should consist of business and economic subjects.

For an accounting major, considerable emphasis should be given to mathematics and English. Unfortunately, most universities consider it beneath their dignity to offer business arithmetic, but inadequate preparation in this area in grade school and high school frequently retards otherwise capable students in their study of accounting. Much valuable time is often lost in elementary accounting courses because of the necessity of teaching the fundamentals of simple interest and discount. Business mathematics will not take the place of a reasonable facility with basic arithmetic, but it will strengthen students in some of the mathematical skills so essential to the accountant. It seems reasonable to require completion of a course in business mathematics and to encourage that it be done early in the student's career.

English composition is, of course, essential. The usual pattern is to require English composition in the freshman year. Then, with the subject once completed no further training in the use of written English is given. Few instructors have the time or

take the trouble to comment on improper sentence structure all too often encountered in written examinations. It is doubtful if there is a single teacher of accounting who is unaware of the criticism often voiced by businessmen and practicing accountants that our graduates do not know how to write well-organized reports. It is indeed unfortunate, because an accountant is so often judged by the style as well as the content of the reports he writes.

Adequate preparation for an accounting career envisages more than a skill with techniques. Among many other things, it presupposes an ability to express one's self clearly in writing. It is, therefore, suggested that to assure that this objective is being attained by accounting graduates an accounting curriculum should provide for an additional course in business communication to be required of all seniors. It is conceivable that the more mature senior would recognize the importance of good writing and approach the subject with greater interest than may have been the case when composition was presented in the freshman year.

It is natural to expect that the accounting curricula in schools of business would vary less than the curricula of allied and supplementary subjects required of accounting majors. Yet, a survey of accounting courses offered in eight western state-supported institutions of higher learning disclosed a considerable variation in the number of credit hours available for a major. The credits ranged from twenty-seven to a maximum of sixty-nine.

What should represent the optimum preparation for entrance into the accounting profession? Before answering the question the primary objective of an accounting curriculum should be determined. The obvious answer, of course, is to remark that the objective is to provide an accounting education. The conclusion is correct ex-

³ Wilcox, Edward B., "Qualifications for a Professional Career," *ACCOUNTING REVIEW*, January, 1944, p. 5.

cept that it should recognize the differences in purpose which motivates students to elect accounting as a major. Students majoring in accounting may be divided into three classes. There are those who study accounting for the purpose of obtaining a type of background that they consider helpful in preparation for a general business career. This group does not anticipate becoming accountants. They may have been encouraged to pursue accounting work realizing that some employers look with favor upon graduates of an accounting course even though the work to be performed in business has no direct relation to accounting. A second class of students are those who anticipate pursuing an accounting career in private industry. Industry offers a wide variety of accounting employment which may be separated into the following categories:⁴

1. Constructive accounting—the analysis, recording, interpretation, and reporting of business transactions.
2. Internal auditing—appraisal of management and audit controls.
3. Systems design and procedure—planning and research.
4. Taxation and other problems of government regulation.
5. Budgetary procedure.

Finally, there is a class of students who aspire to become certified public accountants and enter into the public accounting field.

Should an accounting curriculum be designed to cater to the special needs, if there are such, of each one of the three classes? In substance, should there be three curricula? Or, on the other hand, should one course of study be planned? Under the latter approach the students of each class would select those accounting courses they considered best fitted their particular requirements. Few schools of business can

afford the dubious luxury of a three-course program. From the point of view of economy and effectiveness, one well-integrated accounting curriculum seems preferable. Are the needs of each class of students so different that a special offering of accounting courses is necessary?

An affirmative answer to the question would be offered by some educators. It has been suggested that accounting training should be separated into eight major fields of service.⁵ These are the fields of the commercial accountant, the cost accountant, the utilities accountant, the financial accountant, the government accountant and government agent, the institutional accountant, the professional public accountant, and the professional accounting teacher. It is argued that the basic accounting training of each group should be similar, but that in the senior year the students of each class should specialize in accounting courses designed to fit their particular field of accounting interest.

Apparently, the above point of view accepts the theory that education consists of specific training for work to be undertaken after graduation from school. Most accounting educators would accept that theory in a modified form but might insist in recognizing that education includes more than an accumulation of knowledge. In accounting certain basic techniques must be emphasized, but beyond that point education in accounting should teach students to learn for themselves what they need to know. There are numerous skills that students can postpone learning until the need arises for those skills to be used.⁶

Proceeding on the assumption that ex-

⁴ Boyd, Ralph L., "A Suggested Program for College Training in Accountancy," *ACCOUNTING REVIEW*, January, 1946, pp. 51-56.

⁵ Bowers, Russell, "An Efficient Approach to the Teaching of Accounting," *ACCOUNTING REVIEW*, July, 1947, pp. 293-98.

⁶ Tannery, Fladger F., "The Requirement and Opportunities in Industry for Students of Accounting," *ACCOUNTING REVIEW*, October, 1948, p. 378.

cessive specialization should be avoided, the accounting curriculum best designed to fit the needs of each class of students would be one that accepts the goal of professionalism. That is, the objective would be to prepare students for professional public accounting careers. The high degree of competence required and the necessity of discerning, formulating, and solving professional problems would develop basic ways of thought that would be beneficial to all classes of students. Those whose careers were not planned along professional accounting lines would be adequately served by following such a program in part or in its entirety.

A professional course in accounting should not imply professionalism in the same sense that it is thought of in connection with training for the law, engineering or medicine. Professional training of that type represents specialization that many consider incompatible with the demands placed upon public accountants. Accountants should have the broadest possible background, and a broad background training in most of the professions, such as engineering, medicine, and architecture, does not ordinarily exist.

There are educators who feel very strongly that separate schools of accountancy should be provided for the training of professional accountants.⁷ In support of this point of view, the Committee on Education of the New York State Society of Certified Public Accountants expressed the opinion that, "The professional accountant—whether in public practice or in business or government employment—should have an education which in many of its aspects is more technical and exacting than that required for the general field of business. Accounting education requires more specialized training than can

be given under the present system of higher education."

"Other professions, such as, architecture, engineering, law, and medicine have benefited by the establishment of professional schools. It is believed the accounting profession will also benefit by establishing special institutions of learning for those who desire accounting education. This applies to those wishing accounting education for use in accounting work in business or government employ, as well as those intending to practice as public accountants."⁸

The objection to the establishment of professional schools of accountancy on the undergraduate level lies in the very real possibility of an extension of vocationalized training. The result would be a further limitation of the number of general courses that could be crowded into a college program.

H. T. Scovill suggests that an accounting curriculum should have the following two objectives:⁹

1. To train the prospective accountant in the nontechnical subjects in arts and sciences so that he may develop a background of knowledge and a confidence and an incentive that will lead him into further reading in any of the sciences, humanities, or social sciences after he leaves college.
2. To offer technical training in accounting and allied fields which will enable the graduate to render a most effective type of service in his chosen field.

While Professor Scovill does not enumerate the accounting courses he considers essential in meeting the technical objective the following list of courses is presented as representing a basic curriculum for training in professional accounting.

⁸ Reports by the Committee on Education of the New York State Society of Certified Public Accountants, May 22, 1947.

⁹ Scovill, H. T., "Education for Public Accounting on the Collegiate Level," *ACCOUNTING REVIEW*, July 1946, pp. 261-67.

⁷ See, Ernest J. McLuckie, "Education for Public Accountancy," *The Journal of Accountancy*, September, 1944, pp. 215-17.

Elementary accounting (Record keeping and procedures)
Intermediate accounting (Theory and practice)
Advanced accounting
Cost accounting
Auditing (Theory and practice)
Fund accounting (Municipal and governmental)
Income tax (State and federal)
C. P. A. problems and review

The above courses would represent approximately 25 to 33 per cent of the total credits earned in a normal four-year program.

Additional work in accounting is frequently offered. Courses in financial statement analysis, advanced cost accounting, contemporary accounting, and accounting systems are offered by a number of schools of business.

One course that is frequently neglected, but which should be considered as a part of the student's professional training, is accounting systems. Most theories and analyses presented in the average course in principles of accounting are related to merchandising or manufacturing. Very little consideration is given to the peculiarities in transactions and accounting procedures of enterprises other than merchandising and manufacturing. In order to better prepare the young accountant to meet some of the problems likely to be encountered in professional practice an opportunity should be presented to learn about the operations, accounts, and statements of some of the businesses in the following industries:¹⁰

1. Financial institutions—banks, building and loan associations, insurance companies, finance companies.
2. Public utilities—electric, gas, water, airlines, trucking.
3. Extractive industries—mining, oil (extraction and refining, fisheries, lumbering, saw milling).
4. Service—hotels, laundries, theaters.

¹⁰ *Ibid.*, p. 265.

It can be seen from the brief account of the courses that should be offered in a well designed curriculum that approximately 30 to 50 per cent of the student's time throughout a four-year program will be spent on accounting courses. When should the student's work in accounting begin—in the freshman year or in the sophomore year? The majority of schools of business require students to wait until their sophomore year to start their accounting work.

Postponing accounting work until the second year of college work has one definite advantage. During the first year the student is able to concentrate on cultural background courses. It is often believed that accounting work may be more effectively pursued after the student has acquired a greater background in supplementary subjects. For example, work in mathematics and an introductory course in business increases the significance of accounting concepts and ordinary business routines.

On the other hand, some accounting courses must be taken in sequence before two or more may be taken together. Consequently, a student waiting until his sophomore year to begin the study of accounting will find it necessary to concentrate heavily on accounting subjects in his senior year. The degree of concentration is such that it frequently becomes impossible for the student to take the proper amount of work in allied fields.

In some respects, the advantage of waiting until the sophomore year to begin the study of accounting is nullified by the disadvantage of excessive specialization in the senior year. While certain supplementary courses are undoubtedly beneficial for the later study of elementary accounting, there does not appear to be any significant reason why a first course in accounting could not be pursued effectively in the freshman year when it would be taken

concurrently with the general and supplementary courses. It can be argued that an elementary course in accounting facilitates assimilation of the material in supplementary fields. By introducing accounting in the first year, more time should be available in the last two years of college to explore, with a more mature mind, allied areas of learning.

The introduction of accounting in the freshman year could, conceivably, enable a student to take more accounting courses during his college career. In the interests of developing as broad a background as possible in accounting majors, a maximum number of hours to be allowed in accounting should be established. Such a regulation, effectively administered, would tend to encourage students to take work in English, government, science, management and in other fields during their last year in college.

The solution to some of the problems involving curriculum might be the introduction of a five year program for professional accounting training. Concentration in accounting during the first four years could be reduced to the basic curriculum with more time thereby being

devoted to study in allied fields. The fifth year could then be devoted to a thorough study of professional accounting problems as well as a careful consideration of contemporary accounting thought.

A fifth year of college work, satisfactorily completed, would probably deserve recognition by the granting of an appropriate degree. The University of Texas has recently inaugurated a five year program in accounting leading to the degree of Master in Professional Accounting.¹¹ The requirements for the degree are as follows:

1. Completion of thirty semester hours of senior or graduate level courses with grades of A or B including either a course in Evolution of Accounting Theory or Contemporary Accounting Theory, and either a three-semester-hour thesis or a graduate accounting seminar.
2. Six months of successful full-time internship training in public or industrial accounting.
3. Passage of a general examination covering courses and internship training along the lines usually required of a candidate for a Master's degree.

¹¹ Zlatkovich, Charles T., "University of Texas Offers a Graduate Degree in Professional Accounting," *Collegiate News and Views*, December, 1948, p. 10.

WHAT IS A BALANCED CURRICULUM IN ACCOUNTING?¹

DAVID A. REVZAN

IN DISCUSSING the role of accounting in the university curriculum, I shall concentrate on certain aspects of the problem which, in my opinion, demand particular attention today. Particularly, I should like to place emphasis on the need once again to consider the dual responsibilities of any professional curriculum—the development of capably trained citizens as well as capably trained professional specialists.

To begin with, let us focus our attention for the moment on the peculiar aspects of the role of the accounting curriculum in the university, and in the professional school of business. The first characteristic that should be noted is the fact that much of the professional concentration in accounting is dominated by the focusing effects and the control exercised by preparation for the CPA examination. Rightly, or wrongly, much of the major emphasis of the specialized curriculum reflects the force of gravity exerted by the necessity of obtaining a "license to practice" in the form of the CPA "shingle." And the increasing tendency for nearly all states at present to give uniform examinations under the auspices of the American Institute of Accountants, merely increases the strength of this central magnetic force.

Another factor that needs to be noted as an important molding force, is the widespread importance exerted by opportunities in tax and government accounting, particularly for income tax purposes. The importance of the livelihood furnished by this work, together with other widespread opportunities for immediate employment

by a wide range of employers, serve undoubtedly to attract many students as majors whose prime concern may be to select a field in which job opportunities are most plentiful. Many of these are not immediately interested in working for the CPA label, although this may become a basic interest later on for purposes of professional advancement. But this group of students, it seems to me, are especially important among the total number of majors at the undergraduate levels.

A third background factor which is important to consider is the fact that many schools of business, at least in their earlier days, were primarily schools of accounting. This traditional factor meant several things so far as the development of the curriculum was concerned: Heavy "pulverization" of accounting work early in the development of the field to furnish a minimum time period of work; heavy emphasis placed upon developing evening as well as day-time offerings; and frequently disproportionately heavy requirements of work in accounting for those majoring in other fields of business. The unduly heavy representation which the accounting faculty secured on the policy-formation activities of each school can be noted in passing. It need not be emphasized that the large contributions of revenue from the accounting offerings also carried considerable influence.

In this connection, also, the fact mentioned earlier of the significance of the professional label of CPA—one which developed long before other professional aspects of business originated—endowed this subject matter with a certain "elevation" that tended to reinforce the other aspects of its importance.

¹ This paper was presented at the December, 1948, meeting of the Pacific Coast Economic Association.

These several sets of factors then gave the accounting curriculum overwhelming importance in most schools of business, and a seniority because of its early rise to professional significance. But, in the meantime, several changes had taken place in the environment in which this field of specialization was being offered. The movement away from a four-year undergraduate school of business represents one of the most significant of these. To me, this movement represents the recognition, once more, of the prime responsibility of a university worthy of that designation, to educate people first for citizenship, and then for taking their place in their chosen fields of work. It represents, therefore, the reemergence of the ideals of the liberal arts curriculum.²

On the other hand, it represents a broadening view of the "science of business" in which the evolution of the professional content of various aspects of business reflected itself in the need for a broader business curriculum. And even more recently, of course, this has manifested itself in the tendency for an increasing number of schools of business to place all professional work on a graduate level commensurate with the level of professional specialization in other fields. This narrowing of the time limits for the professional field has created difficulties so far as fitting in all required work in business is concerned.

But not all of the collegiate work represents a movement towards such broadening influences. There still remain many of these four-year business administration colleges. And the increasing number of junior colleges, with terminal training in

business, or with so-called "pre-business" concentrations, have also perpetuated many of the weakening angles of the heavy emphasis on accounting early in the collegiate curriculum.

So much for the background of the problem as I see it.

Today, the problem of securing balance in the accounting curriculum in schools of business has two phases: (1) the recognition of the need to teach this subject as a tool subject to all students majoring in any field of business, and to students in related fields; and (2) the recognition of the need to broaden the professional foundations of the accounting specialist.

The first of these phases has been paid lip service by all for a great many years. And some schools of business have actually attained a fair realization of the objective indicated. But an investigation of the offerings of many colleges and universities will reveal a tendency in all too many instances away from the tool aspect. In many cases, the introductory work is offered much earlier in the curriculum than any other course work in the field. At the same time, the content of these introductory courses reveals, all too often, a tendency to view all who participate either as potential accountants, or potential candidates for the CPA Examination. These courses are not taught as tool courses; i.e., as courses emphasizing the measuring and control aspects of the subject matter. Techniques, procedures, forms, balancing operations—these are the predominant topics for discussion. Not the nature of the problem, but the methodology becomes the be-all and end-all of the teaching process.

Less debiting and crediting would seem to be the answer at least for the non-accounting major. This may lead to the necessary inference that the introductory course work required of all should be divided into two sections: one preparing the

² Note, in this connection, all of the interest that has been aroused in professional periodicals, and books by this problem. See, for example, the following as only a small sample: Sidney Hook, *Education for Modern Man* (New York: The Dial Press, 1946); Report of the Harvard Committee, *General Education in a Free Society* (Cambridge, Mass: Harvard University Press, 1946); Robert M. Hutchins, *Education for Freedom* (Baton Rouge: Louisiana State University Press, 1943).

prospective accounting major for subsequent concentration; the other emphasizing the measuring and control aspects for the non-accounting student. This same implication is inherent, also, in the teaching of other tool subjects such as statistics. I am not sure, at this point, that the broader approach would not be more beneficial to even the accounting majors. But if the beginning work were set up in this manner, the objective of emphasizing the tool rather than the vocational aspects of the work would be realized. The implications for the writers of elementary textbooks in accounting are too obvious to need amplification here.

Consideration ought to be given, also, in scheduling the beginning sequence to the necessity of providing the student with enough of a generalized framework of business so that he has a much better idea of the business environment of organization, policies, problems, and functional operations into which this tool subject has to be applied. We have to avoid at the collegiate level the kind of teaching in a vacuum that all too often characterizes the bookkeeping courses offered in high schools.

And even the general curriculum possibilities of accounting courses should not be overlooked. I shall not dwell at length on this subject. Suffice to say at this point, that many of you may be acquainted with the course in "General Accounting" (Business Administration #10) offered by the School of Business Administration at Berkeley by Professor Quire. This course, emphasizing the accounting principles and procedures particularly as they affect the individual, can be taken only by those sophomores, or students of higher standing, who are not in the School of Business Administration.

To summarize: this phase of the work in accounting requires re-investigation of the meaning of tool subject as it applies to the beginning work in accounting. This will

mean, in turn, the careful planning of the course content from the point of view of what has to be measured and controlled, as well as from the point of view of how. It will require, in many cases, the reworking of the textual and problem content of the basic textbooks as well.

Now, to turn to the problem of the professional curriculum in accounting as it bears on the training of the professional specialists. To my mind, professional training in any field implies the development of a capacity within each trainee for leadership potentialities; provision for a spirit of investigation and innovation; and the development of the sense of responsibility for requirements of standards of conduct. But as Sidney Hook so aptly states the matter:

"A liberal education should do something more than prepare the student to earn his own living. But it should at least prepare him for it. The crucial question is *how* he should be prepared. No conception of liberal education is worth a second glance which professes to be unconcerned with the quality of the life a student will lead after he is through with his formal schooling—a life in which the fruits of his schooling first become apparent. All the great educators of the modern world, despite their differences as to what constitutes the best education, agree that it should be complete in the sense that it should fit men to grapple with their duties as citizens of the community. But a citizen of the community is not only a 'political' entity. He is a producer, a consumer, a potential warrior, a critic, a teacher in some respects, a learner in others. He is sometimes more of one or another. But in the life of the citizen they are all related."³

But these requirements are not merely what I think, or what Professor Hook thinks, or what only other habitués of the ivory tower think. There are increasing pieces of evidence being accumulated all over the country indicating that hard-headed business executives are expressing exactly the same thoughts.⁴

³ Sidney Hook, *op. cit.*, pp. 154-55.

⁴ See, for example, the statements in the following:

Perhaps some quotations from a report of the recent Accountant-Educator Conference at the University of Michigan are in order:

"On one thing the accountants all seem to agree: that is, that nowhere along the educational line do our graduates pick up a really adequate command of written and spoken English. . . ."

"... *Our training today is too much pointed up in technical accounting. The profession wants men with better training in General Business and Economics. A broad general education is better preparation for final success than a too technical training in accounting. We need more businessmen and fewer technicians. A course in human relations would be more useful than a course in municipal or stock brokerage accounting.* (Italics added.)⁸

If it is argued, for example, that professional accountants make some of the best sources of top executives, as the accountants themselves modestly claim, does this not imply, then, the validity of broader curriculum planning implied in everything said above? Does not this require more knowledge of the social sciences, and of the functional fields of business, and less of the narrow concentration on only theory, techniques, and processes of accounting? Should not the accountant have a better grasp of research methods, and of the presentation of research results? And of methods of correlating his knowledge of accounting with other pertinent materials? And, finally of human relations?

But above all, this professional training should be designed to open vistas of original investigation and thinking rather than merely to emphasize standardization of thinking. Does not the professionally trained accountant have to bear his fair share of the responsibility for reducing the competitive differences between firms as a resultant of uniform accounting systems, standard valuation formulae, and the like? Perhaps, my marketing bias leads me to

make too much of attempts to capitalize on differences rather than on likenesses.

The internship principle of professional training, which has been discussed earlier at this Conference, has the germs of an able attempt to bring together theory and practice. But it is not a substitute for broadening of the accounting curriculum in the more fundamental aspects I am discussing. The continued attraction to this field of the largest numbers of students in business should not be construed as meaning that minute subdivisions of courses are necessary.

A word about certain other aspects of the professional responsibility referred to above. Codes of ethics are wonderful things to have printed impressively on expensive parchment, and to have circulated among all members of the guild. But they cannot be effective without some foundation of thinking about and acceptance of social responsibility. In a few cases, this thinking about, and assumption of, social responsibility can be self-developed. For most persons, it requires careful self-development based upon an education which stresses kinds and avenues of thought. Here, too often in the past the over-specialization of all professional work in the university has bred persons narrow in their mental horizons, and their moral and social outlooks. Fortunately a few brave universities have taken corrective steps already, and there are signs that more are becoming concerned.

Increasing bodies of factual information, and of the materials of empirical investigations, should not lead us to assume blindly that what we need to do in our curricula is to train people to know "more and more about less and less." It should lead us, rather, to a recognition of the importance of professional specialization which is balanced by a recognition of a sense of deep-seated responsibility, and of the need for integration with other fields

Leo A. Schmidt, "Employers' Conference Evaluates Accounting Curriculums, Recruitment, Placements," *The Journal of Accountancy*, October, 1948, pp. 292-94.

⁸ *Ibid.*, pp. 292-93.

of professional specialization, as well as with broader fields of knowledge.

No school of business anywhere is going to be able to provide any of its students with a handbook of answers to every problem that each will have to face in his business career. But each school can and should emphasize again and again the virtues of an inquiring mind, of a capacity for thorough objective analysis, and of the development of a keen sense of judgment. And with these, it must give its professional specialists a breadth of vision that can best be called a recognition of the importance of imaginative leadership.

Finally, one other important aspect of this problem comes to mind, although I

shall not give it the full attention it deserves. With the expanding sizes of all colleges and universities, and of collegiate schools of business, in particular, the accounting curriculum (and all others as well) must recognize as part of its responsibilities, the professional training of those persons who will carry on the teaching and research aspects of the work. This aspect, it seems to me, has been too long neglected. Schools of business must assume responsibility for continually improving the quality and vision of their own staffs, as well as providing for the broad foundation of professional specialists in business and government outlined above.

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GENERAL ACCOUNTING VS. TAX ACCOUNTING

HENRY LUDMER

THE INTERNAL REVENUE CODE as it applies to the taxation of the income of corporations has become so complicated and its wording so confused that few laymen can understand it. Moreover, many provisions of the law depart from sound accounting practice and many of the Commissioner's rulings are inconsistent and are based on legal interpretations rather than on generally accepted accounting principles. As a result, corporations must rely more and more on their legal staffs and on expert accountants. But lawyers and accountants find it increasingly difficult to advise them well. At best, they can make recommendations which they hope will be acceptable to the Bureau of Internal Revenue.

INCOME

Net income in the accounting sense is the balance of gross income after the deduction of all expenses incurred in producing the income.¹ Net income in the statutory sense differs from this concept. Many items considered as income by the accountant are specifically excluded and other items are taxed which the accountant does not regard as realized income. The Code defines net income as "the gross income computed under section 22, less the deductions allowed by section 23."²

According to the Code, gross income includes "gains, profits, and income derived from salaries, wages, or compensation for personal service, . . . or from professions, vocations, trades, businesses, commerce, or sales, or dealings in property, whether real or personal, growing out of the owner-

ship or use of or interest in such property; also from interest, rent, dividends, securities, or the transaction of any business carried on for gain or profit, or gains or profits and income derived from any source whatever."³

This broad definition is modified considerably by following subsections which specifically exclude certain items, and by rulings of the Commissioner which specifically require certain items to be included which might not be considered as income even under such a sweeping definition.

Gains arising from transactions in the corporation's own bonds are income, and losses are deductible. Bond premium which is amortized or which is written off when bonds are retired is income. Bond discount in similar transactions is deductible.⁴ Although such gains and losses are generally handled through the surplus account because they do not arise from ordinary business transactions, accountants do not object to the inclusion of these items in taxable income.

However, certain items are required to be included which accountants do not recognize as income at all, or which they regard as unrealized income.

Lump-sum advance rentals received without restrictions or provisional conditions, and bonus payments received for a lease are income in the year received instead of being spread over the rental period or the life of the lease. On the other hand, the payer may not deduct these payments as expenses in the year paid but must spread them over the life of the lease

¹ Robert H. Montgomery, *Federal Taxes on Corporations*, New York, 1945, vol. 1, p. 7.

² Internal Revenue Code, Section 21.

³ Internal Revenue Code, Section 22(a).

⁴ Income Tax Regulations 111, 29.22(a)-17.

or the rental period. This provision is not only inconsistent, but it is unsound. It violates the principle that income and expenses must be treated alike.⁵

The Commissioner also requires gains arising from transactions in the corporation's own stock, when the corporation has dealt with the stock as if it were the stock of another corporation, to be included in gross income. Losses arising from such transactions may be deducted.⁶ Montgomery believes that such handling is permissible when the corporation has bought and sold its own stock on the market.⁷ However, some accountants are unwilling to regard such items as income at all, but rather as an addition to capital. They argue that the excess over par or stated value is regarded as capital when the stock is originally issued, and that the proceeds from the sale of donated stock are regarded as capital. They also argue that purchase and sale of a corporation's stock result in an increase or decrease of the stockholders' interest and are not business transactions in the ordinary sense. They regard it as illogical in any case to consider a portion of the proceeds as an increase in the stockholders' interest and the balance as earned income. They maintain that the gain resulting from the sale or purchase of the stock serves to increase the equity of the remaining shareholders.⁸ It should be pointed out, however, that it is an unsound business practice for a corporation to speculate in its own stock. Moreover, such a practice is unethical. Insofar as the Commissioner's ruling regulates the practice, it is justifiable. On the other hand, the Commissioner has ruled that if a corporation receives its

own stock in exchange for a sale of its property, it is dealing in its own stock as it would in the stock of another, and the gain or loss must be taken into income.⁹ This portion of the ruling seems open to unfair application.

A corporation which acquires property from another corporation in which it is a shareholder for less than the fair market value of the property must include the difference between acquisition value and market value in income. The difference is regarded as a taxable dividend by the Commissioner.¹⁰ This violates usual accounting procedure in two ways: (1) dividends are distributions among shareholders in proportion to their holdings; (2) property should be carried at acquisition value regardless of market value. The probable reason for the ruling is to prevent tax avoidance by transfers of property among affiliated corporations. From that standpoint, it is justifiable.

Among the items specifically excluded from income are some regarded by accountants as not being income in the accounting sense. For example, donations to corporations by shareholders are regarded as additions to capital.¹¹ This is in accord with good accounting practice.

Other provisions appear designed to protect the taxpayer from undue hardship resulting from taxation of windfall income or income not yet realized. Life insurance proceeds received upon the death of an officer when the corporation is the beneficiary are not taxable. Gifts, bequests, devises, and inheritances are not taxable.¹²

Interest on obligations of states, cities, and other political subdivisions and on federal obligations issued prior to March 1, 1941 are tax free.¹³ This is strictly a

⁵ Montgomery, *Federal Taxes on Corporations*, pp. 40-41, 46-48.

⁶ Regulations 111, 29.22(a)-15.

⁷ Robert H. Montgomery, *Auditing Theory and Practice*, 5 ed., New York, 1934, p. 403.

⁸ William T. Sunley and William J. Carter, *Corporation Accounting*, rev. ed., New York, 1944, pp. 97-103.

⁹ Regulations 111, 29.22(a)-15.

¹⁰ Regulations 111, 29.22(a)-1.

¹¹ Regulations 111, 29.22(a)-16.

¹² Internal Revenue Code, Sections 22(b)1, 22(b)3.

¹³ Internal Revenue Code, Section 22(b)4.

statutory exclusion and has been removed on interest on federal obligations issued on or after March 1, 1941.

Relief for financially hard-pressed corporations is provided by excluding from income the gain from the retirement of indebtedness in a corporate reorganization under the Bankruptcy Act or the Railroad Reorganization Act.¹⁴ Retirement of indebtedness negotiated directly with bondholders is regarded as gratuitous and is not taxable.¹⁵

Interest received on defaulted interest coupons of an obligation purchased at a flat price is regarded as return of capital, and not income. This applies only to interest coupons which were in default at the time the obligation was acquired.¹⁶

The recovery of bad debts, taxes paid in prior years, or delinquency amounts are not taxable income in the year they are recovered if they did not result in a reduction of the income tax in the year in which they were charged off. This is known as the "tax benefit" rule. Obviously, the deduction of such items will not reduce the income tax only if a loss was sustained in the year the deduction was made. The exclusion is allowed only to the extent of such loss.¹⁷ For example, assume that a corporation had a loss of \$1,000 in 1942, and therefore paid no income tax. Assume also that the corporation charged off a bad debt of \$1000 in that year. Since the corporation would still have had no income if the bad debt had not been charged off, the deduction did not result in a reduction of income tax and if the bad debt is recovered in a later year it is not taxable. However, if the bad debt amounted to \$1500 and the loss was \$1000, the corporation would have to include \$500 in income in the year of recovery, because it would have had to

pay income tax on \$500 if the bad debt had not been charged off in 1942.

Accountants do not object to the application of this principle, but many of them contend that the principle is not carried far enough. Another section of the code¹⁸ requires the cost or other basis of property to be reduced by the amount of the depreciation or depletion allowed, but not less than the amount allowable. Many accountants maintain that, when the Commissioner has allowed depreciation or depletion rates that later prove to be excessive, the tax benefit rule should apply. When the property is disposed of, the excessive amount should not be included in income to the extent that no reduction of income tax resulted in prior years.¹⁹

Gross income for tax purposes, then, is the corporation's book gross income plus the inclusions and minus the exclusions required by the Code. Net income is determined by subtracting the permissible deductions.

DEDUCTIONS

In general, permissible deductions conform very closely to accounting requirements. However, some of the Code's provisions present some rather knotty accounting problems.

All expenses necessary to the ordinary conduct of the business are deductible.²⁰ Interest is deductible, except interest on indebtedness incurred to carry wholly tax-exempt securities.²¹ For example, if a corporation owns municipal bonds and it has borrowed money to purchase the bonds, it may not deduct the interest it pays on the loan because it has not included the income from the bonds in gross income.

Taxes are deductible except federal in-

¹⁴ Internal Revenue Code, Sections 22(b)9, 22(b)10.

¹⁵ Montgomery, *Federal Taxes on Corporations*, p. 36.

¹⁶ Montgomery, *Federal Taxes on Corporations*, p. 65.

¹⁷ Internal Revenue Code, Section 22(b)12.

¹⁸ Internal Revenue Code, Section 113(b).

¹⁹ "Tax Benefit Rule," *Journal of Accountancy*, Jan. 1946, p. 73.

²⁰ Internal Revenue Code, Section 23(a).

²¹ Internal Revenue Code, Section 23(b).

come, war-profits and excess-profits taxes;²² estate, inheritance, legacy, and gift taxes; local assessments which tend to increase the value of the property; federal import duties and federal excise and stamp taxes, unless they are ordinary and necessary expenses of the business.²³

Losses of property sustained during the tax year which are not covered by insurance are deductible.²⁴

Losses from bad debts are deductible. The corporation may elect to deduct the debts which became worthless in whole or in part during the tax year or to deduct a reasonable addition to a reserve for bad debts. Whichever method the corporation uses, it must be used consistently. Bonds and other evidences of indebtedness of a subsidiary which is 95% controlled by the corporation may also be deducted in the year in which they became wholly worthless.²⁵ Bonds of outside corporations are regarded as capital assets and not as debts.

Contributions to a pension or profit-sharing plan for employees are deductible if the plan meets the specifications of the Treasury Department for an approved plan.²⁶

Charitable contributions may be deducted, but not in excess of 5% of the corporation's net income computed without regard to such charitable contributions.²⁷ For example, assume a corporation has taxable net income of \$10,000 before deducting charitable contributions. If the corporation has made contributions of \$1000, it may deduct only \$500.

The law provides for a "reasonable allowance for exhaustion, wear and tear (in-

cluding a reasonable allowance for obsolescence) of properties used in trade or business or held for the production of income."²⁸ There has been much criticism of the Bureau's depreciation policy. Some have claimed that the Bureau's policy in adhering to a straightline depreciation method which emphasizes low rates makes it difficult to write off assets fast enough and tends to discourage the replacement of old equipment with new. They believe that the Bureau should permit accelerated depreciation, or the writing off of assets at a higher rate during the early period of their life. They also believe that the Bureau should give greater weight to the obsolescence factor. This is the businessman's viewpoint.²⁹ Accountants are somewhat reluctant to accept the principle of accelerated depreciation unless it can be shown that there is a greater decrease in efficiency during the early life of the machine. They regard the straight-line method as preferable in most cases. However, in order that depreciation may be adequate, obsolescence should be considered as a factor in computing depreciation throughout the life of the asset.³⁰ This interpretation is entirely rejected by the Commissioner. He has ruled that an allowance for obsolescence can be taken only when the taxpayer can clearly show that the property is affected by economic conditions that will result in its abandonment.³¹ In other words, obsolescence cannot be considered as a factor in depreciation until the new invention, or other cause of obsolescence, has actually appeared to threaten the length of useful life of the property. Furthermore, the taxpayer must clearly show that its appear-

²² Excess-profits tax has been repealed, effective for tax years beginning on or after January 1, 1946. Prentice Hall, *Federal Tax Course, 1947-1948*, p. 3211.

²³ Internal Revenue Code, Section 23(c).

²⁴ Internal Revenue Code, Section 23(f).

²⁵ Internal Revenue Code, Section 23(k).

²⁶ Internal Revenue Code, Section 23(p).

²⁷ Internal Revenue Code, Section 23(q).

²⁸ Internal Revenue Code, Section 23(l).

²⁹ Burnham Finney, "Needed: A Sensible Depreciation Policy," *American Machinist*, April 25, 1946, pp. 111-112.

³⁰ Montgomery, *Auditing Theory and Practice*, pp. 544-545.

³¹ Regulations 111, Section 29.23(l)-6.

ance will result in the abandonment of the property. This violates the principle that depreciation should be spread over the useful life of the asset. It is scarcely justifiable in a dynamic industrial age when new inventions and improvements of old are constantly making their appearance.

In the case of mining industries and other extractive industries, the property is subject to a deduction for depletion instead of depreciation. The depletion policy favors the taxpayer. However, the provisions are contained in the Code and are the policy of Congress rather than of the Commissioner. There are three different methods for computing depletion. The first is in accord with sound accounting principles. The cost or other basis of the asset is multiplied by a fraction whose numerator is the number of units produced during the year and whose denominator is the total number of units that it is estimated the property will produce. This method is called the "general rule" method and is applicable to all property subject to depletion (natural deposits and timber). Under this method only the basis of the property will be written off. The other two methods are apparently intended to encourage the exploitation of certain kinds of natural resources. They are called respectively the "discovery value" method and the "percentage depletion" method. The discovery value method applies to all mines except mines specified to fall under the percentage depletion method. It provides that, when the taxpayer discovers valuable minerals on property he already owns, he shall use its fair market value after discovery as the depletion basis instead of the cost or other acquisition basis. Like the general rule method, the basis is reduced by the proportion of units produced compared with the number of units that the property will produce.

Under the percentage depletion method, the amount deductible for depletion is a

specified percentage of the gross income from the property. Property subject to this method consists of oil and gas wells and the following types of mines: coal, fluorspar, flake graphite, vermiculite, beryl, feldspar, mica, talc, lepidolite, spodumene, barite, ball and sagger clay, rock asphalt, and metal mines, potash and sulphur mines and deposits. The applicable percentages are as follows:

Oil and gas wells	27½%
Sulphur mines and deposits	23%
Potash mines and deposits	15%
Coal mines	5%
All others	15%

Under both the discovery value and percentage depletion methods, the amount of depletion may not exceed 50% of the taxpayer's net income before depletion is deducted. The amount of depletion must not be less than the amount computed under the general rule method.³² The taxpayer may continue to deduct percentage depletion even after he has recovered the full cost of the property.³³ It is possible and not unusual for a taxpayer to recover tax free an amount greater than the cost of the property.³⁴ The government's depletion policy amounts to an indirect subsidy of the extractive industries. Neither the discovery value method or percentage depletion method conform to sound accounting practice. Cost is the accepted basis for depletion. Moreover, the Treasury Department does not permit depreciation to be based on reappraisal value, and so its depreciation and depletion policies are inconsistent.

The net operating loss carry-over is permitted as a deduction against gross income. The net operating loss may be carried back two years and carried forward two years. If it is not then exhausted, no further deduction is permitted. Certain

³² Internal Revenue Code, Sections 23(m), 114(b).

³³ Montgomery, *Federal Taxes on Corporations*, p. 777.

³⁴ Prentice Hall, *Federal Tax Course*, p. 2107.

adjustments which have the effect of reducing the deduction to an economic loss must be made before carrying the loss back and forward. Similar adjustments must be made in the net gain for the years to which the loss is carried. The net operating loss is decreased by depletion charged in excess of depletion computed under general rule method; by the amount of tax-exempt interest; and by the net operating loss carry-over, if the loss from a preceding year has been carried over to the year of the loss.³⁵ This provision is intended to equalize the effects of the business cycle. The corporation does not have to pay large taxes in good years when it has sustained heavy losses in poor years. Its main disadvantages are that it requires much complicated computation and, by the carry-back provision, it renders uncertain the validity of any financial statement for a period of at least two years. If a sizeable loss is sustained within two years, a substantial profit may be completely wiped out by the carry-back. The computation cannot be completely avoided, but it would be greatly simplified by providing for a straight carry-forward provision of four or five years. This provision would also eliminate the uncertainty with regard to financial statements.

Taxable net income, then, is taxable gross income reduced by the amount of the allowable deductions. Before computing the tax, capital gains and losses must be taken into account.

CAPITAL GAINS AND LOSSES

The basis of an asset in the accounting sense is cost. When an asset is purchased for cash, the Commissioner recognizes cost as the basis. However, due to the fact that the Bureau does not recognize gain or loss on all transactions and consequently any differences must be used to adjust the

basis of the asset, the basis of an asset for tax purposes may vary widely from its basis on the books. It is these two factors, the nonrecognition of gain or loss and the difference in basis, that account for most of the difficulty in accounting for transactions in capital assets.

Capital assets are defined by the code as any property held by a taxpayer except stock in trade; property held primarily for sale to customers; depreciable property or real property used in a trade or business; short-term federal, state, and local obligations issued on a discount basis on or after March 1, 1941.³⁶

Although the definition excludes depreciable or real property used in the trade or business, such property really occupies an intermediate position, for long-term gains from the property are classed as capital gains. However, if the transactions over the year result in a loss, it is classed as an ordinary loss.³⁷

In some transactions, no gain or loss is recognized at all. When productive property used in a trade or business is exchanged solely for property of like kind, no gain or loss is recognized. When there is an exchange of common for common, or preferred for preferred stock of the same corporation, there is no recognition of gain or loss. In such transactions, the basis of the old asset becomes the basis of the new. If cash is given in addition to the property in an exchange for property of like kind, the basis becomes the basis of the old asset plus the cash paid.

In some transactions, there is partial recognition of gain or loss. In an exchange of productive property for property of like kind, if cash is received in addition to the property, no loss is recognized but gain is recognized. The recognized gain may not exceed the amount of cash received. The basis of the new property becomes the

³⁵ Prentice Hall, *Federal Tax Course*, p. 3207.

³⁶ Internal Revenue Code, Section 117(a)1.

³⁷ Internal Revenue Code, Section 117(j).

basis of the old property minus the cash received plus the recognized gain.³⁸

In involuntary conversions, as when insured property is destroyed by fire, if the proceeds are immediately expended to replace the asset no gain is recognized, but loss is recognized. If there is an unrecognized gain, the basis of the new asset is the same as the old. If there is a recognized loss, the basis of the new property is the cost of replacement. If the proceeds are not entirely expended to replace the property, gain is recognized but not in excess of the unexpended proceeds. The basis of the new asset is the basis of the old less cash not expended, plus recognized gain.³⁹

The result of these provisions is that the taxpayer must either carry the assets on his books at the basis for tax purposes, or he must keep a separate record of the tax basis so that he may determine gain or loss when the asset is sold.

Unlike the provision governing individual taxpayers, the corporation must include capital losses and gains in income at 100%, regardless of whether they are long-term or short-term gains or losses. The only reason that it is necessary to distinguish between long-term and short-term gains and losses is that the tax on long-term gains may not exceed 25%. Capital losses are allowed only to the extent that they are offset by capital gains. However, losses in excess of capital gains may be carried forward five years and offset by capital gains of those years.⁴⁰

When the taxable income has been determined by the method outlined above, it is possible to compute the tax. Before computing the normal tax, a credit of 85% of dividends received from domestic corporations is deducted. This credit may not exceed 85% of adjusted net income. The

normal tax rates are then applied as follows:

<i>Normal tax net income</i>	<i>Rates</i>
Up to \$5,000	15%
\$ 5,000 to \$20,000	\$ 750 plus 17% of over 5,000
20,000 to 25,000	3,300 plus 19% of over 20,000
25,000 to 50,000	4,250 plus 31% of over 25,000
Over \$50,000	24% of entire amount

Before computing the surtax, interest on federal obligations issued prior to March 1, 1941 in excess of \$5000 principal value must be added into income because such interest is exempt from the normal tax but not from the surtax. The surtax rates are then applied as follows:

<i>Surtax net income</i>	<i>Rates</i>
Up to \$25,000	6%
25,000 to 50,000	\$1,500 plus 22% of over 25,000
Over 50,000	14% of entire amount

If a corporation elects to file a consolidated return, the surtax rates are increased by 2%.⁴¹ If a corporation has a long-term capital gain, it may be necessary to recompute the tax, excluding the capital gain from net income and adding 25% to the tax obtained. The taxpayer will pay the lower of the two taxes.

In addition to these taxes a corporation may be liable to the section 102 tax on corporations which accumulate earnings for the purpose of avoiding the surtax on its shareholders. It would be possible for the government to lose much revenue if the practice were permitted, because the maximum combined rate on corporations is 38% while on individuals it is 85½%.

In order to determine whether a corporation is accumulating surplus improperly, the Bureau applies certain tests. Each case is decided on its own merits. Close scrutiny

³⁸ Prentice Hall, *Federal Tax Course*, pp. 1508-1509.

³⁹ Prentice Hall, *Federal Tax Course*, pp. 1510-1511.

⁴⁰ Internal Revenue Code, Section 117(c).

⁴¹ Prentice Hall, *Federal Tax Course*, pp. 3111-3112.

will be given to returns when there is evidence (1) that loans unreasonable in amount are made to shareholders, (2) that the corporation has made investments in securities or other property not related to the business,⁴² (3) that a majority of the corporations' stock is held by a family group or other small group, (4) that corporate distributions do not exceed 70% of earnings or for other reasons appear to be inadequate.⁴³

Before computing the tax certain adjustments are necessary to convert the net income into improperly accumulated surplus.

To the net income is added the net operating loss and capital loss carry-overs. This deprives the corporation of the benefit of these deductions. The federal normal and surtax are subtracted. If the corporation has made charitable contributions in excess of 5% of its net income, the amount disallowed may be subtracted. The corporation is also allowed to deduct capital losses not offset by capital gains. The result is the section 102 net income. From this the corporation subtracts the dividends distributed during the year, consent dividends, and the net operating loss of the preceding year if there was such a loss.⁴⁴ A consent dividend is provided for in section 28 of the code. It provides that the stockholders may issue a written notice or "consent" to the corporation that they will include a portion of the corporate surplus in their own individual returns for the year. The corporation may then regard such amount as if it were a dividend actually distributed.⁴⁵

The final result of this computation is the amount of improperly accumulated surplus. The first \$100,000 is taxable at

the rate of 27½%; the excess over \$100,000 is taxable at 38½%.⁴⁶

In addition to the penalty tax under section 102, the Code provides for control of foreign and domestic holding companies organized to avoid high personal surtax rates. Such companies are liable to the provisions if at least 50% of their stock is held by or for a group of five or less individuals, and most of the companies' gross income must be from such specified sources as dividends, interest, rents, royalties, etc. In other words, a personal holding company is not primarily engaged in trade or business. The law provides that the net income of a foreign personal holding company is taxed to the United States shareholders just as though it had actually been distributed to them.⁴⁷ A domestic personal holding company must pay the normal tax imposed on domestic corporations. However, the surtax rates are much higher than on domestic corporations. The first \$2000 is taxable at the rate of 75% and the balance is taxed at 85%.⁴⁸

The purpose of these provisions is to make it unprofitable for individuals to form holding companies to avoid high individual rates.

CONCLUSIONS

It is apparent upon reading the Code that it is in need of revision. Amendments have been added to the various sections which modify or contradict the preceding portions with the result that it requires long study and thorough familiarity with the Code to understand it. However, undue emphasis seems to be placed by some critics on the complexity of the Code itself. It should be rewritten, but most of the confusion and uncertainty has been created in the minds of the taxpayer by

⁴² Morris Goodman, "Section 102—A Postwar Tax Problem," *Journal of Accountancy*, March 1946, p. 203.

⁴³ Prentice Hall, *Federal Tax Course*, p. 3409.

⁴⁴ Prentice Hall, *Federal Tax Course*, p. 3409.

⁴⁵ Internal Revenue Code, Section 28.

⁴⁶ Internal Revenue Code, Section 102(a).

⁴⁷ Internal Revenue Code, Section 337.

⁴⁸ Internal Revenue Code, Section 500.

the policy of administration and by the interpretations of the courts. These are based on legal principles rather than accounting principles. Since businesses must be run on sound accounting principles, it seems unfair to ask them to make their records conform to the minute rulings of the Commissioner and the decisions of the courts. Besides, it would be impossible. Since it is a principle of the law and the policy of the Commissioner that each case must be decided on its own merits, the corporation has no way of knowing what the Commissioner's stand will be on any particular transaction. It would be fairer and sounder, it seems, for the Commissioner to permit the use of any accounting method which is based on principles deemed sound by professional accountants.

When the Commissioner finds it necessary to audit returns, he should make the examination with an eye to discovering error, fraud, or avoidance rather than to detect some fine legalistic distinction which will enable him to assess additional tax. This would apply, of course, only if in similar but very slightly different cases the taxpayer would not have to pay tax. The point is that if the Commissioner bases his policy on accounting instead of legal principles, he can spend less time making hair-line decisions and more time enforcing the law where enforcement is needed.

The ruling on lump-sum advance payments should be changed so that the person who pays and the person who receives payment may report the transaction on the same basis. It seems fair to extend the tax benefit rule to include all income which amounts to a prior year's deduction which did not result in a reduction of tax. These changes would have the virtue of basing the rulings on principle rather than on arbitrary decisions governing special cases.

The Commissioner should give greater weight to the obsolescence factor in de-

preciation. While some control is undoubtedly necessary, depreciation is largely an individual matter. Various companies have varying degrees of wear and tear on similar assets, depending upon the uses to which they are put. It seems, then, that some leeway should be given in the matter of rates. Excessive gains on the exchange of assets would indicate that the company's depreciation rates were excessive and the Commissioner could act accordingly. In this connection, it would seem sounder to recognize gains and losses when the exchange is made in all cases.

The depletion provision of the Code should be changed so that no taxpayer could recover more than the cost of his property. This is not only unsound accounting but it is unfair to other taxpayers. If a subsidy is necessary to encourage exploitation of natural resources, it should be made directly and openly and not indirectly and secretly by burying it in the Internal Revenue Code.

The net operating loss provision should be made a straight carry-over. This would simplify computation and would eliminate the necessity of filing applications for refunds of taxes paid in prior years. Incidentally, the Commissioner would be saved the work of auditing and paying refunds.

Although the computation of the section 102 tax is somewhat complicated, the permitted adjustments seem fair. Moreover the tests applied by the Commissioner seem fair, and the corporation is always given a chance to explain what it is going to do with the money, even if it fails to meet the tests.

Similar reasoning applies to the taxation of personal holding companies. These were once used widely for purposes of tax avoidance and the Code provisions governing them have greatly reduced the practice.

FINANCIAL ADMINISTRATION OF THE UNITED NATIONS

JOHN B. PAYNE

FINANCIAL ORGANIZATION

ALL DEPARTMENTS and all supervisory officials have at least some responsibility with respect to financial administration. However, specialization is deemed to be necessary and certain organizations and officials have been charged with specific responsibilities and duties in financial administration. These organizations and officials are as follows:

1. The General Assembly
2. Committees of the General Assembly:
 - (a) Fifth Committee—Administrative and Budgetary Committee (A Main Committee¹)
 - (b) Advisory Committee on Administrative and Budgetary Questions
 - (c) Committee on Contributions
3. The Secretary-General
4. The Assistant Secretary-General for Administrative and Financial Services

The General Assembly

By the terms of Article 17 of the Charter the General Assembly considers and approves the budget of the United Nations and apportions the expenses among the member nations. In these respects it resembles the usual governmental legislative body which is the fund-raising and fund-granting authority for the governmental area which it serves. Also, like the usual legislative body, it has set up committees corresponding to an appropriation committee and a ways and means committee, or a committee on taxation. These committees are:

- (a) Administrative and Budgetary Committee (Fifth Committee)

- (b) Advisory Committee on Administrative and Budgetary Questions
- (c) Committee on Contributions

Administrative and Budgetary Committee (Fifth Committee)

The Administrative and Budgetary Committee, ordinarily called the Fifth Committee, is one of the main committees of the General Assembly. It corresponds to the usual appropriation committee so far as most of this work is concerned. However, it also considers the assessment of contributions. Every resolution involving expenditure of money proposed for enactment by the General Assembly must be reviewed by the Fifth Committee which explains the effect the proposal will have upon the budget.

The report submitted by the Advisory Committee on Administrative and Budgetary Questions to the General Assembly is referred to the Fifth Committee for consideration and recommendations. The report of the Committee on Contributions is also referred to the Fifth Committee.

Advisory Committee on Administrative and Budgetary Questions

The General Assembly appoints a committee which is, in effect a working party of nine officials, including two recognized financial experts. The complete title of the committee is "Advisory Committee on Administrative and Budgetary Questions." However, it usually is referred to as the "Advisory Committee." This committee makes an expert examination of the budget and assists the Administrative and Budgetary Committee (Fifth Committee). The examination of the budget and a gen-

¹ The Main Committees are: 1st—Political and Security; 2nd—Economic and Financial; 3rd—Social, Humanitarian and Cultural; 4th—Trusteeship; 5th—Administrative and Budgetary; 6th—Legal.

eral review of the administrative work of the United Nations require several weeks of the Committee's time during each year.

At the beginning of each regular session of the Assembly the Advisory Committee submits a detailed report on the budget for the ensuing fiscal year and a detailed report on the accounts of the previous fiscal year. The Committee also examines the administrative budgets of the specialized agencies and any proposed financial arrangements between the United Nations and any of the specialized agencies.

Committee on Contributions

The United Nations Charter (Article 17, par. 2) provides that expenses shall be apportioned among member nations by the General Assembly. The rules of the Assembly provided for the appointment of a Committee on Contributions to advise the Assembly as to the apportionment. The apportionment is to be fixed broadly according to the capacity to pay. Up to the present time assessments have been made according to a scale of contributions determined on a percentage basis.

The Committee also advises the Assembly on the assessments to be made against new members, appeals by members for changes in assessments, and as to Article 19 of the Charter which relates to action to be taken concerning member nations whose contributions have not been paid.

The Secretary-General

The Secretary-General is the chief administrative officer of the United Nations. He is primarily responsible for the preparation of the budget and its presentation to the General Assembly. He is likewise responsible for the execution of the budget program after it has been approved by resolution of the Assembly.

The Assembly by its rules has provided: (1) that no resolution involving expenditure shall be recommended for approval

by the Assembly unless the Secretary-General submits an estimate of the cost of the resolution, and (2) that the Secretary-General shall keep all committees informed of the estimated cost of resolutions recommended by the committees for approval by the General Assembly.

The Secretary-General has delegated much of his responsibility concerning financial matters to the Assistant Secretary-General for Administrative and Financial Services.

The Assistant Secretary-General for Administrative and Financial Services

The Assistant Secretary-General for Administrative and Financial Services is in charge of the Department of Administrative and Financial Services. This Department does the financial, budgetary, and personnel work of the United Nations. It furnishes information to the General Assembly, the Councils, and their subordinate bodies. It maintains relations with the International Court of Justice and the specialized agencies on financial matters.

The Department advises the Secretary-General with respect to the financial and administrative requirements of proposed programs which are being considered for adoption. It does the budget work for the United Nations. This Department also performs work incident to examination of claims, internal auditing, treasury operations, and accounting, and reporting.

THE ANNUAL FINANCIAL (BUDGET) PROGRAM: EXPENDITURES

The Secretary-General and the Assistant Secretary-General for Administrative and Financial Services are responsible for the annual financial program. All work incident to planning, presenting and defending this program is done under policies formulated by these officials and is carried out under their supervision and direction.

The annual financial program is fre-

quently referred to as the "Budget" although the meaning of the word "Budget" may sometimes be restricted to the document or volume in which the annual financial program is presented to the legislative body. In the United Nations the legislative functions relating to finances are performed by the General Assembly.

With respect to expenditures, the various stages or steps through which the Budget passes may be grouped under the following headings:

1. Planning and preparation of the Budget
2. Action taken on the Budget by the General Assembly
3. Administration of the Budget
4. Audit of expenditures

Further analysis of each of these main headings is next presented.

Planning and Preparation of the Budget

1. The Department of Administrative and Financial Services requests the departments to submit their estimated financial requirements for the next fiscal year.
2. Each department requests its bureaus and divisions to submit their estimates to the department.
3. Each department receives, reviews and modifies the estimate of its bureaus and divisions, compiles these estimates into departmental estimates, and submits them to the Department of Administrative and Financial Services.
4. The Department of Administrative and Financial Services reviews and modifies the departmental estimates and compiles these estimates into the Budget Document for the following fiscal year.
5. The Secretary-General submits the Budget Document to the General Assembly and to the Advisory Committee on Administrative and Budgetary Questions.

Action Taken on the Budget by the General Assembly

1. The Advisory Committee reviews the Budget, holds detailed hearings thereon, and makes suggestions for modification of the Budget to the Secretary-General. This Committee makes a detailed report on the Budget to the General Assembly.
2. The report of the Advisory Committee is referred to the Fifth (Administrative and Budgetary) Committee. The Fifth Committee holds extensive hearings on the Budget and submits a report of its findings to the General Assembly.
3. The General Assembly considers the report of the Fifth Committee and by the passage of a resolution enacts the Budget Document into law. By this action the General Assembly appropriates the amounts which may be spent during the fiscal year under consideration.

Administration of the Budget

1. The Secretary-General and the Assistant Secretary-General apportion appropriated funds to the departments. This apportionment is known as making an allotment.
2. Obligations are incurred against the allotments for salaries, travel, goods, and services.
3. When obligations (other than for personal services which are paid by payroll) become due the payees present claims which are examined. If the claims are found proper, disbursement vouchers are prepared authorizing payment.
4. The vouchers are paid by checks or in cash.
5. The financial transactions pertaining to expenditures are recorded in books of account from which financial re-

ports (including receipts discussed below) are prepared for the information of officials, the delegations of the member nations, and the public.

Audit of Expenditures

1. Staff members designated as internal auditors make audits of the books and records after payments have been made and prepare audit reports which are submitted to officials of the United Nations.
2. The Board of External Auditors (explained hereinafter) makes an audit of the accounts and records after payments have been made and submits a report of its audit to the General Assembly.

ANNUAL FINANCIAL PROGRAM— RECEIPTS

Practically all of the money required for operating the United Nations is obtained from assessments on member nations. Other amounts of income are derived from the sale of publications, income from investments, and rentals.

The financial operations for each year are authorized by the General Assembly. These authorizations are effected by the passage of resolutions enacting the budget into the equivalent of appropriation acts with many subdivisions.

The total amount assessed against member nations will not necessarily be equal to the total of the appropriations. This difference is due to the fact that adjustments may be made to the total appropriations (or the total amount to be financed for the year) because of supplementary appropriations, estimated miscellaneous income for the budget year, income or deficiencies applicable to former years not previously taken into account, contributions obtained by admission of new member nations into the United Nations, and unused appropriation balances of former years.

Contributions from Member Nations

1. Notices of assessments are forwarded to member nations.
2. Member nations forward contributions to United Nations.
3. The contributions are deposited in the Federal Reserve Bank of New York. Amounts not immediately required for operations are invested in order to obtain interest earnings.
4. As money is required for operations it is transferred from the Federal Reserve Bank to commercial banks.

Receipts—Other than Contributions from Member Nations

1. In some instances bills are submitted to individuals or organizations indebted to the United Nations.
2. Cash is received and deposited in commercial banks to be used for operating purposes.

Receipts are recorded in the books of account and financial reports are prepared from the accounts for the information of operating officials, the delegations, and the public.

The Internal Auditors and the Board of External Auditors make audits of the receipts and prepare reports of the audits.

FUNDS AND APPROPRIATIONS

Funds

In general, a fund may be defined as money or other resources set aside or designated for general or particular purposes. Its use is limited to those purposes for which it was established. A fund may constitute a legal entity, an accounting entity, or both. It may have its own assets, liabilities, income and expenses. The funds administered by the United Nations are presented next.

The General Fund

The General Fund is used for all assets, liabilities, income and expense not appli-

cable to other funds. The annual contributions of member nations toward the operating expenses of the United Nations are placed in the General Fund. Appropriations made by the General Assembly to cover regular expenses of operation are financed from the General Fund.

The Working Capital Fund

The Working Capital Fund was created by contributions from member nations in order (1) to finance operations of the United Nations until the regular annual contributions to the General Fund were received, and (2) to provide a reserve for extraordinary and unforeseen expenses.

The following definitions for extraordinary expenses and for unforeseen expenses are contained in the 1946-1947 budget document (pages 36 and 37):

"Extraordinary Expenses"

Expenses for items or objects outside the scope of the budget estimates—i.e., outside the program on which the estimates were based."

"Unforeseen Expenses"

Expenses arising from or incidental to the carrying out of a program based on approved policies, which expenses were not foreseen when the estimates were made—e.g., extra expenses occasioned by rising prices. Unforeseen expense is to be distinguished from extraordinary expense which arises from new (usually emergency) items outside of the General Assembly approved policies."

Staff Provident Fund

The Staff Provident Fund was established to take the place temporarily of a retirement scheme which has since been developed. However, it is presumed the Staff Provident Fund will be continued for the benefit of staff members who are not eligible for admission to the retirement scheme. Income is realized by the fund through deductions from the salaries of staff members and through contributions by the United Nations.

Pension Fund

The Pension Fund was established to provide retirement and disability benefits for staff members with sufficient permanence of tenure. The Pension Fund in accordance with the regulations approved by the General Assembly shall be maintained by:

1. The contributions of the participants
2. The payments of United Nations (and specialized agencies which join the pension scheme)
3. The income earned from investments
4. Any other income appropriate to the purposes of the Fund

International Children's Emergency Fund

This fund was created to be utilized and administered for the benefit of children and adolescents of countries which were victims of aggression and for child health purposes generally. The fund has received money from UNRRA, from various nations, from private organizations, and from individuals.

Library Endowment Fund

This fund was transferred from the League of Nations. It was created as the result of a gift from Mr. John D. Rockefeller, Jr., for the establishment of a library. The capital of the fund and the income are to be maintained separate from the other assets of the United Nations. The income of the fund shall be applicable only for the purpose of the library.

Darling Foundation Fund

This fund was transferred from the League of Nations. It was established by private subscription in memory of D. Darling. Whenever accumulated interest permits, a prize is to be awarded for an original work on malaria.

Leon Bernard Fund

This fund was transferred from the League of Nations. It was established for

the purpose of granting at regular intervals a prize for some piece of practical work in the field of social medicine.

APPROPRIATIONS

An appropriation is an authorization by a legislative body which permits expenditures of funds for certain purposes and subject to certain restrictions. Simultaneous provision may be made to obtain funds to cover the proposed expenditure or the appropriation may permit the use of any funds not otherwise appropriated or designated for some other use. In the United Nations the appropriation of funds to cover ordinary operating costs is accomplished by enacting the Budget for the year to be financed. The appropriation is made from the General Fund. Unforeseen and extraordinary expenses are financed by authorizations made for the use of part of the Working Capital Fund.

The Appropriation Act for a fiscal year (i.e. the Calendar Year) is based on the Budget Document. The Budget is prepared under the direction of the Secretary-General. It is reviewed, and may be modified successively by the Advisory Committee on Administrative and Budgetary Questions, by the Fifth Committee of the General Assembly (Administrative and Budgetary Committee), and by the General Assembly itself. As stated above, the Appropriation Act is enacted by the General Assembly voting the Budget (as modified). Therefore, the order of the items in the Appropriation Act follows very closely the arrangement of the items in the Budget Document.

The appropriations are arranged to cover (1) the United Nations proper and (2) the International Court of Justice. The second grouping is presented according to "parts" which bring related functions together. The next division, which is prepared by "sections," to a large extent is based on organization units, with several

sections placed under each part. The sections are further divided into "chapters" (frequently according to organization unit such as principal organs of the United Nations, departments, commissions, etc.) The chapters are still further analyzed according to objects of expenditure. Thus, in summary the Budget and the Appropriation Act may be outlined as follows:

Parts I to VII

Sections 1 to 39 (with several sections under each part)

Chapters I et seq. (under each section as required)

Objects of Expenditure (under each chapter as needed)

FINANCIAL STATEMENTS

Status of Allotments by Sections

This statement shows for each appropriation section: (1) the amount appropriated by the General Assembly, (2) the allotments issued by the Secretary General or the Assistant Secretary General for Administrative and Financial Services, (3) the obligations incurred against the amounts allotted, (4) the unobligated balances of the allotments, (5) the balances of amounts appropriated which are available for making further allotments and (6) the amount remaining available for obligation.

Status of Allotments by Chapter and Object of Expenditure

In general, for each section of the Appropriation Act a statement is prepared by chapters and objects of expenditure showing for each object (and summarized by chapter): (1) the allotment authorized by the Assistant Secretary General for Administrative and Financial Services, (2) the obligations which have not been liquidated, (3) the expenditures approved by means of vouchers, and (4) the unobligated balance of the allotment against which additional obligations may be incurred.

Status of Working Capital Fund

This statement shows with respect to each advance authorized to be made from the Working Capital Fund: (1) Maximum amount authorized by the General Assembly, (2) advances authorized by the Secretary-General, (3) advances made, (4) repayments, and (5) balances of advances outstanding. The authorized advances may be classified generally as advances for unforeseen and extraordinary expenses, loans to specialized agencies, and self-liquidating projects.

Statement of Assets and Liabilities of the General Fund

This statement shows, with respect to the General Fund, the various types of assets owned by United Nations and the several classes of liabilities owned together with their respective values. The difference between assets and liabilities is expressed as "Excess of Assets over Liabilities." As of the end of any month the accounts, (with the exception of items which were transferred from the League of Nations) consist mainly of cash and current items which will presumably be settled within the near future.

Statement of Cash Balances

This statement contains a list of the amounts and locations of the cash balances on hand and in bank as of the end of each month. The information is shown separately for each of the following funds: General, Working Capital, Pension, Staff Provident, Library Endowment (acquired from the League of Nations), Special Trusts, and the International Children's Emergency Fund.

Statement of Member Nations' Contributions and Advances to the Working Capital Fund

This statement presents information concerning each member nation with re-

spect to contributions assessed, contributions received, and balance due.

Summary of Assets and Liabilities of Special Funds

This statement contains a summary of the assets and liabilities of the following funds: Pension, Staff Provident, Library Endowment, Special Trusts, International Children's Emergency Fund, and the Headquarters Site Fund.

Statement of Investments

This statement contains a list of investments by types and amounts in each of the following funds: Working Capital, Pension, Staff Provident, International Children's Emergency Fund, Library Endowment Fund and other trust funds.

Statement of Casual Income

This statement shows the various types of income (other than contributions from member nations) realized by United Nations. During 1947 some of the principal sources of income were: Sale of publications, rental of Lido Beach Hotel, automobile rentals, income from investments, rental of space at Geneva, and sale of fixed assets and chattels.

EXTERNAL (INDEPENDENT) AUDIT

Appointment and General Duties of the Board of Auditors

The General Assembly by resolution No. 74(1) approved 7 December 1946, appointed officials of three countries to serve as external auditors of the accounts of the United Nations, of the International Court of Justice, and of such specialized agencies as may be designated by the appropriate authority. The first appointments were for one, two and three years. Thereafter, the appointments will be made for three years with the term of one official expiring each year. The auditors in office constitute the Board of Auditors

which elects its own chairman and adopts its own rules of procedure. The Board, subject to budgetary limitations relative to the cost of the audit and after consultation with the Advisory Committee on Administrative and Budgetary Questions relative to the scope of the audit, may conduct the audit under the provisions of the resolution in such manner as it considers proper and may engage commercial public auditors of international repute.

The report of the Board of Auditors is to be submitted, together with such certified accounts and such other statements as the Board deems necessary, to the General Assembly to be available to the Advisory Committee by the first day of June following the end of the financial (calendar) year to which the accounts relate. The Advisory Committee is to forward its comments on the audit report to the General Assembly.

Requirements of the General Assembly

The General Assembly in the resolution pertaining to the Board of Auditors stated in part that: the "Board . . . may conduct the audit under the provisions of this resolution in such manner as it thinks fit. . . ." However, later in the resolution ten requirements concerning the audit are presented. Presumably, these requirements are intended to give general directions to the making of the audit without, perhaps, too stringently limiting its scope and the discretion of the Board of Auditors. These ten requirements, in summary, are as follows:

1. The Board is to satisfy itself that the statements and accounts are correct, that money has been expended only pursuant to appropriations, and that transfers from the Working Capital Fund have been duly authorized.
2. If after necessary investigation it appears that, in particular instances,

the procedure followed and the internal control so warrant, the Board may waive further audit by its staff.

3. The Board is to examine stores or stock accounts.
4. The Board shall have free access at all convenient times to the books of account and all relevant information. Special arrangements must be made concerning files dealing with policy matters.
5. The Board is not to criticize purely administrative matters but may comment upon financial results of administrative action.
6. Items which the Board may consider objectionable are to be submitted to the accounting office of United Nations. Such items are not to be criticized in the auditors' report until the accounting office has had a chance to furnish explanations.
7. Information obtained from a department of United Nations is not to be published by the auditors without prior reference to the duly authorized officials of United Nations.
8. This requirement deals with the contents of the report of the Board of Auditors and calls for mention being made in the report of the Board of the following:
 - a. Extent and character of the audit,
 - b. Matters affecting the completeness or accuracy of the accounts such as incomplete information, items omitted from the accounts, and expenditures not properly supported by vouchers,
 - c. Other matters about which the General Assembly should be informed such as fraud; wasteful or improper expenditures or obligations; defects in the system or regulations relating to receipts, expenditures, or stores; expenditures not made in conformity with appropriations; and expenditures made in excess of appropriations,
 - d. Accuracy or inaccuracy of the stores records as determined by stock-taking and examination of the records,

e. Transactions accounted for in a prior year concerning which further information has been obtained, or transactions to be entered into in a subsequent year concerning which the Assembly should have advance information.

9. This requirement prescribes the form of certificate to be included in the report of the Board of Auditors. The certificate is as follows:

"The above accounts have been examined in accordance with our directions. We have obtained all the information and explanations that we have

required, and we certify, as the result of the audit, that, in our opinion, the above account is correct"; adding, should it be necessary, "subject to the observations in our report."

10. The Board of Auditors has no power to make disallowances but shall recommend that the Secretary-General make disallowances. The Board is to bring to the attention of the Assembly any cases where such recommendations have not been acted upon by the Secretary-General.

AVAILABLE

There are available a few numbers of the Proceedings of the AMERICAN ASSOCIATION OF UNIVERSITY INSTRUCTORS IN ACCOUNTING, the predecessor organization of the AMERICAN ACCOUNTING ASSOCIATION.

Numbers available at \$1.00 per copy are:

Vol. I	No. 1	May, 1917
Vol. III	No. 1	Jan., 1919
Vol. V	No. 1	Mar., 1921
Vol. VII	No. 1	April, 1923
Vol. VIII	No. 1	June, 1924
Vol. IX	No. 1	Feb., 1925
Vol. IX	No. 2	Dec., 1925

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AMERICAN ACCOUNTING ASSOCIATION

Mr. Clete Chizek, Sec'y-Treasurer
School of Business—University of Chicago
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THE TEACHERS' CLINIC

S. PAUL GARNER

EDITOR'S NOTE: Many of the experienced teachers, as well as some of the new ones, have developed devices and techniques for the presentation of certain of the knotty aspects of accounting, and it is felt that such suggestions might well be made available to the other members of the teaching profession through *The Teachers' Clinic*. Accordingly, contributions are hereby invited. Please address all correspondence to S. Paul Garner, School of Commerce and Business Administration, University, Alabama.

FUNCTIONS OF THE WRITTEN EXAMINATION

MAURICE MOONITZ

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From the standpoint of the instructor, a written examination should perform the following functions. These functions have been arranged in the approximate order of their importance.

1. Furnish an incentive to the student to review the work covered.
2. Supply a report to the instructor on the extent to which the class as a whole has absorbed the material presented.
3. Constitute a valuable additional method of teaching the subject matter of the course.
4. Afford an objective basis for assigning a grade to each student.

The least important function from an instructor's point of view is that of measuring the accomplishment of individual students. By contrast with this rating as to importance, a student too often views an examination solely as a device for assigning him a grade. As a consequence, the prime objective of the student in taking an examination is to get the right answer. Freely translated, "right answer" means the one which the instructor expects, not necessarily the one the student believes to be correct or which he has developed by independent thought and analysis. In similar fashion, a C.P.A. examination, in theory at any rate, purports to determine the level of competence of a candidate. As in the case of the typical student in our accounting courses, the C.P.A. candidate must come up with the right answer in

order to pass. The attitude of the student and of the C.P.A. candidate is, of course, highly rational. A passing grade is normally the immediate objective to be attained. An instructor, however, need not have the same objectives in mind as the student; in fact, since the major function of the instructor is to teach, he should not be influenced unduly by the attitude of the student, the C.P.A. candidate, or the C.P.A. examiner.

Parenthetically, it may well be that the relative success of younger, professionally inexperienced candidates in passing the C.P.A. examination, as compared with older ones, is ascribable to the fact that the professionally inexperienced are just out of school and know how to take a written examination. That is to say, the younger ones are more sophisticated, and therefore give back to the examiners what the candidate thinks the examiner wants to read. The older, more mature, professionally experienced candidate is naïve in such matters. He probably assumes the examiners want good, sound, well-constructed answers to the questions and proceeds to waste considerable time in supplying this fancied demand.

No major disagreement exists, I feel, with respect to the first two functions listed at the outset, namely, to supply an incentive to the student to review the material covered to date, and to furnish a report to

the instructor on how well the class as a whole is doing. Also, no one will quarrel with the assertion that an examination serves as a means of evaluating or grading an individual's work, although some may be disposed to object to its low place in the hierarchy. The third function (the examination as a teaching device) is left for further attention in the hope that some exchange of ideas may result on the specific techniques available for performing this function.

One technique which should be more widely employed in framing accounting examination questions may be termed the "technique of the oblique approach." Ideally, no problem or question should be included which is either a direct replica of an example already worked over by the student or an obvious modification of these examples. For example, if the work on cash has consisted of some general discussion as to the nature of cash, with problem material dealing with bank reconciliations and their preparation, the student should not be given the usual data and asked to prepare, as an examination question, a bank reconciliation. A problem of this type will merely test his ability to remember what the problems he has already worked looked like. Instead, something akin to the following would be in accord with the Law of the Oblique Approach:

1. In support of a general ledger figure for cash, a bank reconciliation containing non-cash items or other errors of classification is submitted. Ask the student to indicate the correct balance of cash, the adjusting entry necessary to correct the books, and, perhaps, a proper reconciliation statement.
2. Reproduce a bank reconciliation in a form different from the one employed in class. Ask the student to describe what he would do with the information contained therein.

The objects of this approach are (1) to determine if the student understands the accounting concept of cash; and (2) to add to his knowledge of the subject matter

under consideration by exposing him to situations he has not encountered before, but which are still close enough to his previous experience so that he may be expected to handle them with a reasonable degree of facility.

As a further example of this type of approach, let us take a question from a recent C.P.A. examination:

The bookkeeper of a large hardware company has made a practice of setting up merchandise and the corresponding accounts payable at the gross list price including trade and cash discounts.

The candidate was then asked to indicate the effect of such a procedure on the company's financial statements. This is an excellent question because it is highly improbable that any candidate ever was instructed in class to follow the practice described, yet all should know that trade discounts are ordinarily not reflected on the books, and that there are at least two generally accepted methods of handling cash discounts. He must then trace the effects of an unorthodox practice—a practice which is similar enough in form to the orthodox ones not to confuse or baffle anyone reasonably well-grounded in present-day accounting principles. In effect, the candidate must perform an analysis probably different in detail from any analysis he has previously done. In so doing, he exhibits his competence in dealing with one type of accounting situation and, more important, he has been exposed to a new situation.

One corollary of the oblique approach is the avoidance of questions which merely require a student to state, list, or enumerate a given number of provisions, items, or points, without further ado or discussion to determine if he really knows anything. An example, almost classic in its austerity, is furnished by the first question on the November, 1947, A.I.A. examination in auditing:

State five significant provisions for which an auditor should particularly look in examining the Articles of Incorporation of a company and amendments thereto.

That's all there was. No criteria of significance given or asked for, no query as to why those provisions were picked by the candidate, no probing to determine what he would do with the data. Just state five provisions and pick up five easy points. True, a question of this type is easy to formulate; it is easy to grade. Unfortunately, whether a student guesses correctly which 5 points the reader considers most important or whether he does not guess one correctly tells us nothing at all about his understanding of the relationship between a corporation's articles (as amended) and the objectives of an independent audit.

A second technique may be termed the "nutcracker or mousetrap technique." Here the student is exposed to two or more different questions on the same point, each question, of course, slanted from a different view. The objective of this approach is to indicate to the student how to coordinate apparently disparate data. The following example illustrates this technique by use of a threefold approach:

1. A relatively simple "single-entry" situation is posed. Asset and liability totals, but not net worth, are given at two successive year-end dates. Also include some data on purely capital transactions during the intervening year, such as dividend declarations or capital stock issuance. Then ask the student to calculate what the net profit must have been.
2. Ask the student to explain, in general terms, the relationship between *any* company's balance sheet and its profit and loss statement.
3. Pose a situation in which a stockholder is suspicious of his company's reports—profits so much, per the income statement, cash is lower than it was a year before, receivables are down substantially, accounts payable are higher, no dividends declared during the year. How is this possible? Ask the student to explain.

Clearly, each of the three questions sketched relates to the same set of elementary propositions, namely, the net profit figure represents an increase in proprietary equity resulting from business transactions, but excluding transactions with the stockholders: proprietary equity is the difference between *total* assets and *total* debts; therefore changes in selected or isolated asset or liability accounts are not indicative of profit trend, etc.

Perhaps the student has been drilled on these or similar propositions, and can repeat them verbatim. If he can, what does that demonstrate other than perhaps the gift of total recall? A comparison among the answers to the three questions outlined above will tell, and the instructor is in a position to know whether he can proceed to other material. The student learns because he has applied a bit of seemingly formalistic ritual concerning some identities ($A \text{ minus } L \text{ equals } P$, and its derivatives) to three related situations, all three of which, by our present assumptions, he has not linked together before.

The techniques described must be used judiciously. They may all too easily be subverted into instruments of torture; unwittingly, an instructor may give way to certain sadistic tendencies by setting traps for the unwary student. This clearly should be avoided—sadistic pleasure of the instructor is *not* the objective. With our sadistic impulses held in check, however, a valuable teaching aid is available in the examination questions we put to our students.

The techniques described should probably be used sparingly at the elementary level, then used more extensively in courses beyond the introductory one. Fundamentally the method involved is one of using the familiar as an introduction to the unfamiliar. When a student is not familiar with much in the way of accounting or its related fields, we cannot reasonably ex-

pect too much of him in the way of an exploration of the unknown. However, after a year of accounting, an introductory economics course, some work in commercial law, and some exposure to applied economics or commerce courses, in addition to the increasing maturity and experi-

ence which come with age, a student may be expected to correlate a much wider field of experience. Consequently, in the junior and senior years the examination may properly be used to advantage as a full-blown addition to the teaching methods employed.

TEACHING THE SIGNIFICANCE OF PRACTICAL CONSIDERATIONS

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To the practicing accountant, the chief fault of newly graduated assistants lies in their failure to see eye to eye with him on certain matters. They seem "unpractical" or "too theoretical." If he were a little more analytical of employee deficiencies, he might subdivide the latter's tendency to be too theoretical into four parts:

- 1) A failure to understand the significance of materiality and its general application.
- 2) A failure to understand the relationship that must exist between the cost of obtaining accounting data and the benefits to be derived from its use.
- 3) Complete unawareness of the existence of pressure exerted upon accountants by management, stockholders, and other interests.
- 4) No real conception of the effect of tax considerations upon accounting decisions.

To some extent, at least, criticism of college graduates in accounting as not having a proper understanding of these matters is quite justified. Most graduates are improperly grounded in these practical considerations and much can be done in the schools and in the field to improve the situation.

Materiality has to do with relative im-

portance. It deals with amounts, not with nature. Consider, for example, accrued interest of thirty dollars on a note receivable. Any student who had completed a course in elementary accounting should recognize the nature of this item as an addition to income as well as a current asset and would insist that it be entered. The practitioner, however, would first inquire as to how important a thirty dollar addition to assets and income might be in relation to the financial position and results of operations of the concern; and in many cases he would conclude that the item was not of sufficient importance to justify an entry.

Similar differences might exist between student and practitioner in regard to such problems as charging small expenditures to capital or revenue, adjusting the accounts for other deferred and accrued items, recording merchandise in transit at the balance sheet date, and proper treatment of expense vouchers in an imprest cash fund. Students have been taught to distinguish sharply between asset and expense items, to adjust all accounts at the balance sheet date regardless of the amount involved. Practicing accountants, on the other hand, are as much concerned with the relative importance of the amounts involved as they are with the nature of the items.

To balance the benefits to be obtained from accounting data against the cost of obtaining it is frequently a difficult task even for experienced accountants. Students fresh from a classroom where the problem has not even been mentioned have no background for judging such relative worth.

To the student who has spent a full class hour together with thirty or forty other students while an instructor discussed how to differentiate between capital and revenue charges, the thought that some differentiations of this sort might be too costly to be worth making is something of a surprise. He has not only been drilled, quite properly, in the importance and theoretical aspects of the problem, but he has no conception of the cost of man-hours and the fundamental importance of that cost. An expedient practice, such as a policy of expensing all items under \$100.00 comes as a real surprise. Not only is he certain that the practice ignores the theory he has learned with difficulty and been taught to reverence, but he has no acquaintance with the important reasons why such a practice is a common and accepted one. Consequently he tends at first to dispute the propriety of such practices. But even more important than that, in his zeal to perform each assignment properly and with results beyond criticism, he gets the information he feels is desired without regard to the time required to obtain it. His attitude is likely to be: There is only one right way to do the job and cost is not a controlling factor.

The regard for time is one point on which practicing accountants can do much to orient their new employees through proper on-the-job training. Unfortunately they sometimes fail. Practicing accountants often are poor teachers; they frequently can not or will not give adequate instructions to subordinates. Consequently, the new man has no basis for proceeding to meet his problems other than his classroom

training. Upon review of the completed assignment, the supervising accountant finds it easier to tell the new man that his completed or proposed analysis is "impractical" than it is to point out exactly why it is impractical and to show how the time and effort spent in obtaining the information could better be spent in some other way. If specific instructions with reasons were given preliminary to commencing the task and the results later subjected to a truly analytical review, again with reasons for all criticisms, alert college-trained men would develop a basis for appraising relative cost far more quickly than usually is now the case.

The student who has learned his accounting under typical classroom conditions is very likely to be as unaware of the pressures exerted upon practicing accountants in the every day pursuit of their calling as he is of the importance of man-hour cost. Most field work is undertaken under some sort of pressure. This is particularly true of accounting which yields figures of vital importance to a variety of different and sometimes opposing interests.

The accounting department of any company is subject to a certain amount of pressure from management. The nature of the pressure may vary but it is almost always evident. It may result from a desire to keep expenses as low as possible, in which case valuable analyses may be eliminated and important controls omitted. It may have to do with the interests of an important officer in a specific pet subject, in which case that subject may be emphasized unduly and at the expense of others. Not infrequently it has to do with the making of accounting decisions in such a way that arbitrary rulings of management over-ride the good judgment of the accountant.

This latter especially is sometimes almost beyond belief to newly graduated students. Far too often his classroom train-

ing has dealt with accounting as if it operated in a vacuum, unaffected by pressure or control from any superior. So far as he has been taught, accountants are a superior class whose decisions are never questioned. The practicing accountant knows better. He is well aware of the pressure under which he operates, aware that he must either get along with management or get out. Management is in a position to have its decisions implemented in one way or another and outright opposition rarely accomplishes anything. Practicing accountants know too that progress in any field of effort involving human relations is a long, slow proposition, frequently requiring the compromise of many minor points in order that major issues may not be lost. Here again, materiality may arise, this time not as to amounts but as to issues.

One special phase of pressure, important enough to be a major consideration of any accounting department, has to do with federal and state taxes on income. Out of each dollar of net income, government gets a large share. Management quite naturally desires to pay no more in the way of taxes than necessary. Put this very natural tendency together with two facts: (1) that the amount of tax levied is based upon an accounting computation using accounting data, and (2) that accounting practices and procedures are far from being a fixed and accepted code. One can readily see the problems that might be involved. Without attempting either to criticize or approve, one can see that given a choice among possible alternatives, management will generally select the procedure which results in the lowest tax. Where the alternatives are equally acceptable from an accounting point of view, no problem is encountered. But where the better procedure results in the larger tax, the accountant's persuasive powers must be extremely effective or it is almost inevitable that the less

satisfactory procedure will be adopted. This is a situation inherent in our present social and economic order and it is not too much to say that it is a real and constant problem of both industrial and public accountants.

What can the university instructor in accounting do to make his students more practical? First of all, he should make them aware of each of these problems. A great part of being practical (or of not being impractical) is to recognize the existence and importance of the problems involved. Materiality, the importance of cost, and the significance of management and tax pressure should certainly be brought to the attention of every student who looks forward to a career in accounting.

In general, it is not sufficient to deal with such matters in a single lecture at the beginning or end of a course. To be properly impressed upon the student mind they must be a constantly recurring subject discussed throughout his accounting training.

It is interesting to note that this particular subject does not lend itself to the problem approach. College graduates are seldom criticized for a lack of training in specific accounting matters which can be satisfactorily incorporated into problems simulating actual conditions. But one is at a loss to develop special problems which isolate and stress ways of being practical. The alternative to special problems is, of course, to incorporate this matter in other problem situations. This ties in with the point made above, that the necessity for giving due weight to practical considerations be covered over and over again. Discussion of this particular subject in connection with other accounting problems throughout the course will gradually bring home to the student the all-prevailing importance of practical considerations. And this is the proper way to discuss the subject. Practical considerations never arise by

themselves but only in connection with other accountancy matters. Hence, appropriate discussion of them should be in conjunction with other problems.

Considerable care is necessary on the part of the instructor in order that only due weight be given to these problems. Many students, in their eagerness to gain quick solution to all problems, are more than willing to scrap accounting theory completely in favor of tax law or management fiat. Tending toward the same result are instructors whose attitude may be summed up as: "That is the theoretical solution, but this is how it would be done in practice." Certainly nothing is gained by such unwarranted cynicism. The instructor must give his students a basis for properly balancing the requirements of ac-

counting theory against the practical considerations of actual field work. What is needed is first a discussion of the problem with a solution arrived at on a basis of proper theoretical considerations only. Following this, the instructor can quite properly indicate the possible effect which practical considerations might have. In this way the student is given a proper understanding of theory and at the same time is indoctrinated with the necessity of considering matters beyond pure theory in arriving at a final solution.

It seems to the writer that a procedure of this general type applied throughout a student's accountancy courses might go far toward reducing, if not eliminating, the criticism that college graduates do not have a practical approach to accounting.

ON TEACHING DEPRECIATION

RUSSELL BOWERS

Carnegie Institute of Technology

The teaching of depreciation accounting offers possibilities of greater economy in the use of a student's time. In the attempt to conserve time of course no compromise should be made in thoroughness of presentation or mastery of the essentials. The point of departure for the treatment of depreciation may well be Hatfield's famous "What They Say About Depreciation" in the *ACCOUNTING REVIEW*, March 1936. But with respect to the most effective procedure in teaching one improvement may be suggested. The problem is one of building the appropriate associations in a student's mind. Depreciation accounting thus should be treated as part of the larger business problem. Unless this is done the student may not learn the best relationship of depreciation charges with the business problem as a whole.

Depreciation accounting may be defined briefly as systematically charging the cost of certain durable, wasting assets to periodic operating accounts. The concept is simple, yet it is too abstract if the business problem is more than the determination of cost or income for a particular year. While double entry accounting is greatly superior to any other type, there is always some danger of double entry technique and terminology being misleading. Under the usual presentation the student is in danger of becoming more naïve even than the businessman who is not conversant with double entry accounting. If the student learns his first year accounting "well," he will be impressed with the formal truth that the correct accounting treatment of depreciation does not create a "depreciation fund" either with which

to replace the original depreciable asset or to preserve the original dollar investment in the asset. He may think of the practical businessman who speaks of a "depreciation fund" as a naïve person who should at least have gone through a sophomore course in accounting. Under the usual course plan a student rarely learns the relationship between depreciation as cost allocation and depreciation as related to a fund of assets until his second or third year when he may be introduced to the "Statement of Sources and Applications of Funds." The delay is too long. Two "separate" problems as closely related as a practical business matter should not be so completely disassociated psychologically, even if they must be disassociated analytically.

Economists in recent years have been impressed by the fact that under generally accepted depreciation policies, current assets accumulate at a greater rate than does income. In a real sense they find there is a so-called depreciation fund which the accountant, who ought to know most about it, often denies.

The problem or case selected for demonstration by the instructor should be done with the end in view of teaching the student that the depreciation charge to operations and the depreciation credit to the asset do not in any way create a fund or other asset; but that nevertheless if the revenue is sufficient to cover all expenses including depreciation, then a depreciation fund *is* created. This fund may or may not be segregated from other assets. Usually it is not. But the fund is in the form of current assets for the reason that the revenue or "sales" measures a source of assets, which assets are usually in current form. This problem offers the appropriate occasion to demonstrate the conversion of depreciable assets into current assets to the extent that the business as a whole is a success. This can be done by the use of a

simple balance sheet example. If need be, the example can be varied in order to stress the operation of the principle under somewhat varying conditions.

Whether the depreciation fund created under successful operations is adequate to replace the original asset or its equivalent is of course a separate aspect of the problem. But it is contended here that this is the appropriate time psychologically to introduce the problem of obtaining funds with which replacement could be made even though no such replacement should be presumed. If no such fund is created, it is only because the firm has not been successful in meeting its total costs assignable to the revenue under consideration. Whether the fund when there is one is segregated and earmarked is a secondary matter concerning which too little of the right kind of attention has been given.

Let us take an example. A business has invested funds in various productive factors, i.e., various sorts of inventories, plant and equipment. The simplified balance sheet, assume, appears as follows:

Balance Sheet, January 1

<i>Assets</i>	
Cash.....	\$ 10,000
Receivables.....	15,000
Inventories.....	35,000
Land.....	40,000
Buildings.....	200,000
Machinery and Equipment.....	100,000
	<u>\$400,000</u>
<i>Equities</i>	
Capital Stock.....	\$350,000
Surplus.....	50,000
	<u>\$400,000</u>

The Income Sheet for the year (or other appropriate period) following the date of the above balance sheet is as follows. For simplicity of illustration all sales may be assumed to be for cash.

Net Sales.....		\$250,000
Factory Cost of Sales.....	\$85,000	
Selling Expenses.....	70,000	
General Expenses.....	65,000	220,000
		<u>220,000</u>
Net Revenue.....		\$ 30,000

The analysis of expenses shows that the three items of expense, which are classified by the usual operating function for general purposes, shows depreciation included in each of the three functional expenses as follows:

	Depreciation on Building	Depreciation on Machinery and Equipment	Total
Factory Cost of Sales.....	\$3,200.....	\$ 9,400.....	\$12,600
Selling Expenses.....	400.....	500.....	900
General Expenses.....	400.....	100.....	500
Total.....	\$4,000	\$10,000	\$14,000

Included in expenses, appropriate to the assumed case, is total depreciation of \$14,000. This sum is a charge to operating costs of the year for the use of building and machinery and equipment. It can be reflected in the accounts as follows by journal entries.

Factory Overhead.....	\$12,600	
Selling Expense.....	900	
General Expense.....	500	
Buildings.....		\$ 4,000
Machinery and Equipment.....		10,000
To allocate the depreciation charges for the year.		

If desired for the sake of more adequate statistical information, the same facts may instead be recorded as follows:

Factory Overhead.....	\$12,600	
Selling Expense.....	900	
General Expense.....	500	
Building Reserve for Depreciation.....		\$ 4,000
Machinery and Equipment Reserve for Depreciation.....		10,000
To allocate the depreciation charges for the year and to allow for depreciation cumulatively in a reserve account.		

It is assumed that factory overhead is transferred to "Work in Process" and that the product has been completed and also sold. It is necessary generally to avoid reference to depreciation on the factory building and machinery as expense *per se*, because this will handicap a student in understanding manufacturing costs. It should be pointed out specifically that in

the example used it is assumed for simplicity that the inventories of work in process and finished goods are constant. At the close of the year of operations, holding all other conditions constant or after due allowance for any other changes, the

balance sheet continuing as above, will appear as follows:

Balance Sheet, December 31	
Assets	
Cash.....	\$ 54,000
Receivables.....	15,000
Inventories.....	35,000
Land.....	40,000
Buildings.....	196,000
Machinery and Equipment.....	90,000
	<u>\$430,000</u>
Equities	
Capital Stock.....	\$350,000
Surplus.....	80,000
	<u>\$430,000</u>

It should now be observed that surplus has increased by \$30,000, the amount of the profit. But cash has increased not only by \$30,000 but by \$44,000. Since sales are assumed to be for cash, emphasis on profit may obscure the working capital possibilities. The addition to working capital which is in excess of net income, i.e., \$14,000, is accompanied by a reduction in the stated value of buildings and machinery and equipment by the same amount.

As a further refinement on the example the assets on the new balance sheet may be written according to the alternative technique of recording cumulative depreciation, as follows:

Assets

Current Assets:			
Cash.....	\$ 54,000		
Receivables.....	15,000		
Inventories.....	35,000		\$104,000
Plant:			
Land.....		\$ 40,000	
Building—Cost.....	\$200,000		
Reserve for Depreciation.....	4,000	196,000	
Machinery and Equipment—Cost.....			
	\$100,000		
Reserve for Depreciation.....	10,000	90,000	\$326,000
Total Assets.....			<u>\$430,000</u>

For the student who finds the demonstration too difficult to follow and also for the student who has not found it too difficult but who wishes to draw a summary conclusion, the process may be repeated in shorter form abbreviated as follows.

Balance Sheet, January 1

Current Assets.....	\$ 60,000
Plant.....	340,000
	<u>\$400,000</u>
Capital Stock.....	\$350,000
Surplus.....	50,000
	<u>\$400,000</u>

Assume net income for the year of \$30,000. If depreciation included in expense of the year is \$14,000, then the value of plant at the end of the year is decreased by \$14,000, while the current assets are increased by \$44,000. Thus,

Balance Sheet, December 31

Current Assets.....	\$104,000
Plant.....	326,000
	<u>\$430,000</u>
Capital Stock.....	\$350,000
Surplus.....	80,000
	<u>\$430,000</u>

It is preferable to present the more complicated version of the problem first—not the simpler form. This is perhaps not the most popular way to teach, but I am convinced it is the most effective. Practical business problems do not come in simple form, nor are they handed to the accountant or businessman in clear form for a solution. The student should be taught above all how to formulate a problem from a mass of ill-defined facts which are at first not too clearly defined or easy to grasp but which tend to take on clear form after considerable study.

PROFESSIONAL EXAMINATIONS

A Department for Students of Accounting

HENRY T. CHAMBERLAIN

THE FOLLOWING problems were prepared by the Board of Examiners of the American Institute of Accountants and were presented as the second half of the May, 1949 C.P.A. Examination in accounting practice. The candidates were required to solve problems 1 and 2 and either problem 3 or 4. The time allowed was four and a half hours. The weights assigned were: problem 1, 18 points; problem 2, 7 points; problem 3 or 4, 25 points.

A suggested time schedule is given below:

Problem 1	50 minutes
Problem 2	30 minutes
Problem 3	75 minutes
Problem 4	75 minutes

No. 1

The Rheta Rose Manufacturing Company produces an item which it sells direct to consumers under its own brand. The item sells at \$12.50 per unit, which is a long-established price. Due to a general decline in business activity, sales are currently being made at the rate of 5,000 units per month which is only 40% of the normal productive capacity of the plant of the company.

An analysis of the costs of the company for a recent month, during which only 4,000 units were produced and 5,000 units sold, shows the following:

<i>Manufacturing Costs</i>	
Direct labor.....	\$ 9,900.00
Superintendent's salary.....	1,000.00
Assistant superintendent's salary.....	750.00
Power purchased.....	560.00
Direct materials.....	4,000.00
Purchased parts.....	2,400.00
Depreciation of building.....	1,420.00
Maintenance of building.....	206.00
Heat and light.....	348.00
Indirect labor.....	2,240.00

Miscellaneous supplies.....	800.00
Depreciation of machinery.....	3,640.00
Repairs to machinery.....	480.00
Property taxes.....	600.00
Insurance (fire).....	80.00
Social security taxes.....	456.00
Miscellaneous.....	1,120.00
	<u>\$30,000.00</u>

<i>Selling Costs</i>	
Manager's salary.....	\$ 833.33
Salesmen's commissions.....	18,750.00
Travel.....	247.05
Advertising.....	500.00
Clerical salaries.....	300.00
Packing and shipping.....	2,108.43
Miscellaneous.....	1,203.79
	<u>\$23,942.60</u>

<i>Administrative and General Costs</i>	
Officers' salaries.....	\$ 1,525.00
Office salaries.....	975.50
Telephone and telegraph.....	217.73
Supplies.....	486.21
Bad debts.....	625.00
Miscellaneous.....	392.86
	<u>\$ 4,222.30</u>

An offer has been received from a chain store by the treasurer of the company to purchase 5,000 units a month of the product with only immaterial modifications, to be shipped and billed to the individual stores. The items would be sold under the store's label and would be packed and shipped as directed by the chain at their expense. They offer \$7 per unit unpacked on the basis of a one-year contract. The management of the Rheta Rose Company does not expect that there will be an improvement in the business within the next year, and there is no fear that the sale of the items to the chain would reduce the present volume of sales to consumers. The company does not believe it can afford to accept the offer as it is losing on its present price of \$12.50; therefore, it appears that

losses would be substantially increased by entering into the sales contract with the chain.

The treasurer calls you in to prepare an analysis which will show the result of accepting the order in comparison with the result if the order is not accepted. In preparing your analysis you are to assume that all items of cost are either completely fixed or completely variable, depending upon the usual dominant characteristic of each item and the data given herein.

No. 2

The operations of a department of a retail store which uses the "retail method" of inventory determination are given in the figures presented below. You are to set up in good form a computation showing the ending inventory at sales price and at cost as determined by the "retail method."

Opening inventory—cost.....	\$14,250
Opening inventory—sales price.....	19,105
Purchases—cost.....	33,771
Purchases—sales price.....	46,312
Purchase allowances.....	1,093
Freight-in.....	845
Departmental transfers (debit)—cost.....	100
Departmental transfers (debit)—sales price.....	140
Additional markups.....	1,207
Markup cancellations.....	274
Inventory shortage—sales price.....	704
Sales (including sales of \$4,460 of items which were marked down from \$5,920).....	37,246

No. 3

You have been called in by a member of the board of directors of the Fayetteville Company for advice in connection with a proposed plan of reorganization. He provides you with the information that follows, and asks that (a) you prepare a statement in good form as it might be expected to appear in a balance-sheet prepared for publication, showing the capital and surplus of the company as of December 31, 1947; (b) you prepare a statement showing the condition as it would exist on January 1, 1948 if the reorganization plan were made effective as of that date; and (c) you prepare a statement showing the

amount of earnings per share of common stock in 1947 if the proposed plan could have been in effect as of January 1, 1947.

The Fayetteville Company is a manufacturer of machine tools. Its business has shown wide fluctuations and there have been corresponding variations in profits. For a number of years prior to 1946 there had not been any significant average earnings; however, for the year 1946 there was a net profit of \$942,100. As of December 31, 1946 the following statement was prepared:

\$3 Cumulative preferred stock, \$50 par value—outstanding 96,200 shares (dividends in arrears since September 30, 1930).....	\$4,810,000
Common stock, no-par—outstanding 120,000 shares at assigned value of... ..	3,365,473
Earned deficit 1/1/46.... (\$1,174,280)	
Profit for 1946.....	942,100
Total.....	<u>\$7,943,293</u>

Parentheses () denotes red figure

A plan of capital adjustment had been worked out during 1946, which was ratified by the stockholders and made effective as of January 1, 1947. This plan provided that the \$3 preferred was to be reduced from \$50 par value to \$40 par value; that it continue to be preferred for \$3 per share dividends on a cumulative basis and that it be preferred in liquidation at \$50 per share and redeemable at the option of the company at \$55 per share. In settlement of dividends in arrears, the company paid \$360,750 cash and issued 216,450 shares of "B" stock having a par value of \$10 per share. The "B" shares are non-voting and are not entitled to dividends. They are redeemable at \$20 per share and entitled to \$20 per share after preferred but prior to common in liquidation. The agreement under which they are issued provides that a cash redemption fund shall be set up equal to 50% of the yearly net profits in excess of dividend requirements on preferred stock. The fund is to be used to purchase and retire "B" stock. "Tenders"

are to be obtained from stockholders, the lowest being accepted. If no tenders are received within three months after January 1 of each year, the shares to be retired are to be determined by lot. The provisions of issue also state that as long as any "B" stock is outstanding, no dividends may be paid on common stock. The assigned value of common was also reduced to \$600,000.

The surplus created by this restatement of stock was treated in accordance with accepted accounting practice. All stockholders accepted the exchange offer.

The operations for the year 1947 resulted in a net profit, after taxes, of \$1,631,316. Dividends for the full year were paid on the preferred stock.

It now appears that operations are going to be profitable for an indefinite period and the board of directors desires to work out a plan whereby common stock can be put on a dividend basis. Preferred is currently selling for \$52 per share and "B" stock for \$9.50 per share.

Based on these values, a plan is under consideration by the board of directors, which it is hoped will enable them to place common on a dividend basis if good earnings continue. This plan calls for authorizing a 5% debenture issue which will be offered to the preferred stockholders in exchange for their stock at the rate of \$100 of debentures and two shares of common for each two shares of preferred. It is anticipated that the common will be put on a \$1 annual dividend basis after the capital adjustments proposed. Holders of "B" stock are to be offered one share of new 6% preferred which is to be issued having \$100 par value, and five shares of common for each 10 shares of "B" stock, all before use of the retirement fund.

No. 4

The City of Patwray voted a bond issue for the purpose of constructing a modern sewer system in a section of the city. The

cost is to be borne 10% by general revenues of the city and 90% by assessment against the property in the area of the improvement.

You are to prepare a balance-sheet of the fund as of the close of the fiscal year of the city, December 31, 1948.

The following transactions are to be considered:

February 1, 1948—the city engineer submits to city council an estimate of the cost of the project, showing a total of \$455,000. The council approves the estimate and project, subject to voter approval of the necessary bond issue.

April 1, 1948—A ten year 4% bond issue of \$460,000 was approved by the voters of the city, the proceeds to be used for the project.

April 10, 1948—A contract for \$15,000 covering preliminary planning was entered into by the trustees who are carrying out the project.

April 15, 1948—The assessment roll is certified on the basis of \$415,000 due in ten equal annual installments starting with May 1, 1949. Interest at 4% per annum from May 1, 1948 is to be paid on each installment due date, based on the total assessment outstanding.

April 30, 1948—The preliminary plans are completed and an invoice of \$13,700 is received from the contractor in full payment. The trustees borrow \$25,000 from the general fund of the city to pay this and other costs. The invoice was paid on May 5, 1948.

May 20, 1948—A contract for construction was entered into at a price of \$420,000 subject to some possible future adjustments.

June 1, 1948—\$200,000 of the authorized bonds were sold at 101. The entire issue is to be dated June 1, 1948, with interest payable December 1 and June 1 each year. The bonds mature at the rate of \$46,000 per year, starting June 1, 1949.

July 31, 1948—A partial payment of \$26,100 was made to the contractor, which amount was 90% of the amount due based on percentage of completion. The loan from the general fund was repaid.

November 1, 1948—The remaining bonds were sold at 98 and accrued interest.

August 1, 1948 to December 31, 1948—Payments to the contractor amounted to \$284,400; 10% of the amount due having

been withheld pending completion. \$4,210 of costs in connection with administering the construction project were paid during the

period. The bond interest was paid at due date. The city paid \$2,300 on its part of the cost of the project.

Solution to Problem 1

Rheta Rose Manufacturing Company Statement of Estimated Income and Expense for One Month Based on Certain Assumed Conditions

	5000 units	Additional 5000 units	Total Including proposed contract
	Without proposed contract	Applicable to proposed contract	
Sales	\$62,500.00	\$35,000.00	\$97,500.00
Manufacturing costs			
Direct labor.....	\$12,375.00	\$12,375.00	\$24,750.00
Superintendent's salary.....	1,000.00		1,000.00
Assistant superintendent's salary.....	750.00		750.00
Power purchased.....	700.00	700.00	1,400.00
Direct materials.....	5,000.00	5,000.00	10,000.00
Purchased parts.....	3,000.00	3,000.00	6,000.00
Depreciation of building.....	1,420.00		1,420.00
Maintenance of building.....	206.00		206.00
Heat and light.....	348.00		348.00
Indirect labor.....	2,240.00		2,240.00
Miscellaneous supplies.....	1,000.00	1,000.00	2,000.00
Depreciation of machinery.....	3,640.00		3,640.00
Repairs to machinery.....	600.00	600.00	1,200.00
Property taxes.....	600.00		600.00
Insurance (fire).....	80.00		80.00
Social security taxes.....	555.00	495.00	1,050.00
Miscellaneous.....	1,120.00		1,120.00
Total	\$34,634.00	\$23,170.00	\$57,804.00
Selling costs			
Manager's salary.....	\$ 833.33		\$ 833.33
Salesmen's commission.....	18,750.00		18,750.00
Travel.....	247.05		247.05
Advertising.....	500.00		500.00
Clerical salaries.....	300.00		300.00
Packing and shipping.....	2,108.43		2,108.43
Miscellaneous.....	1,203.79		1,203.79
Total	\$23,942.60		\$23,942.60
Administrative and general costs			
Officers' salaries.....	\$ 1,525.00		\$ 1,525.00
Office salaries.....	975.50		975.50
Telephone and telegraph.....	217.73		217.73
Supplies.....	486.21		486.21
Bad debts.....	625.00		625.00
Miscellaneous.....	392.86		392.86
Total	\$ 4,222.30		\$ 4,222.30
Net Income	\$ (298.80)	\$11,330.00	\$11,031.10

(See page 447 for Solution 2)

Solution to Problem 3

Fayetteville Company Working Papers—Capital Adjustments January 1, 1947 to January 1, 1948				
	December 31, 1946	Reorganization January 1, 1947	January 1, 1947 Operations	December 31, 1947
		Dr.		Cr.
\$3.00 cumulative preferred stock, \$50 par, 96,200 shares.....	\$4,810,000.00	(1) \$4,810,000.00		
\$3.00 cumulative preferred stock, \$50 par, 21,645 shares.....		(1) \$3,848,000.00		
Common stock.....				
120,000 shares.....	3,365,473.00	(2) 2,765,473.00		
96,200 shares.....				
106,225 shares.....				
Capital.....				
216,450 shares.....		(3) 2,164,500.00		
Deficit.....	*232,180.00	(4) 232,180.00		
Paid-in surplus.....		(3) 2,525,250.00		
		(4) 232,180.00		
Earned surplus:				
1947 net profit.....				
1947 preferred dividend.....				
5% debentures.....				

Key to Entries

- (1) To record change in par value of \$3.00 preferred stock.
- (2) To record reduction in assigned value of common stock.
- (3) To record settlement of arrearage on preferred stock.
- (4) To transfer deficit to paid-in surplus account.
- (5) To record issuance of debentures and common stock in exchange for \$3.00 preferred stock.
- (6) To record issuance of 6% preferred stock and common stock for "B" stock.
- (7) To transfer deficit to paid-in surplus.

(a) Capital stock and surplus

\$3.00 cumulative preferred stock, par value \$40.00 per share, preferred in liquidation at \$50.00 per share, redeemable at \$55.00 per share, 96,200 shares issued and outstanding.....

Capital stock, Series A, par value \$10.00 per share, 216,450 shares issued and outstanding.....

Common stock, no-par value, assigned value \$5.00 per share, 120,000 shares issued and outstanding (Note A).....

Paid-in surplus.....

Earned surplus since January 1, 1947.....

Note A

The Series B stock is non-voting and the shares of this issue are not entitled to any dividends. Upon liquidation Series B shares are entitled to \$20.00 per share after providing for the liquidating preference of the preferred shares and they may be called for redemption at any time at \$20.00 per share. The terms of this issue require the creation of a retirement fund equal to 50% of the annual net profit after providing for dividends on the preferred shares. While any Series B shares are outstanding no dividends may be paid on common stock.

Fayetteville Company Statement of Capital Stock and Surplus and Bonded Debt Giving Effect to Proposed Recapitalization Plan as of January 1, 1948				
	January 1, 1948	Reorganization January 1, 1948	January 1, 1948	January 1, 1948
		Dr.		Cr.
5% debentures.....	\$4,810,000.00			
6% preferred stock, par value \$100.00 per share, 21,645 shares outstanding.....	2,164,500.00			
Common stock, no par value, assigned value \$5.00 per share, 324,425 shares outstanding.....	1,622,125.00			
Paid-in surplus.....	328,634.00			
	\$8,925,259.00			
Fayetteville Company Statement of Earnings per Share of Common Stock for the Year 1947 on the Assumption that the January 1, 1948 Proposed Reorganization Had Been in Effect during 1947				
Net Income for 1947.....	\$1,482,206.00			
Less net interest cost on 5% debentures:				
Interest.....	91,390.00			
Less reduction in Federal income taxes (38% of \$240,500.00).....	\$240,500.00			
Available for dividends on preferred stock.....	\$1,290,316.00			
Dividends on 6% preferred stock.....	149,110.00			
Earnings available to common stock.....	\$1,141,206.00			
Earnings per share of common stock based on 324,425 shares outstanding.....	\$1.17			

Solution to Problem 2

Computation of Inventory on Sales Price
and at Cost by the Retail Method

	Cost	Retail
Opening inventory.....	\$14,250.00	\$19,105.00
Purchases (net).....	32,678.00	46,312.00
Freight-in.....	845.00	
Departmental transfers.....	100.00	140.00
Mark-ups, less market cancellations.....		933.00
	<u>\$47,873.00</u>	<u>\$66,490.00</u>
	72%	100%
Sales.....		\$37,246.00
Mark-downs.....		1,460.00
Inventory shortage.....		704.00
		<u>\$39,410.00</u>
Inventory at sales price.....		<u>\$27,080.00</u>
Inventory at cost as determined by the retail method (72% of \$27,080.00).....		<u>\$19,497.60</u>

Solution to Problem 4

The following entries are made to summarize the transactions in the fund:

	<i>April 1, 1948</i>	
Bonds Authorized.....	\$460,000.00	
Bonds payable.....		\$460,000.00
To record bond issue approved by voters.....		
	<i>April 15, 1948</i>	
City's share of improvement cost.....	\$ 46,000.00	
Assessments receivable.....	415,000.00	
Appropriations.....		\$461,000.00
To record assessments of property and the share to be paid from general taxes.....		
	<i>April 30, 1948</i>	
Cash for construction.....	\$ 25,000.00	
Due to General Fund.....		\$ 25,000.00
To record loan from General Fund.....		
	<i>April 30, 1948</i>	
Appropriations.....	\$ 13,700.00	
Cash for construction.....		\$ 13,700.00
To record payment for plans.....		
	<i>May 20, 1948</i>	
Encumbrances.....	\$420,000.00	
Contract for construction.....		\$420,000.00
To record contract for construction.....		
	<i>June 1, 1948</i>	
Cash for construction.....	\$202,000.00	
Bonds authorized.....		\$200,000.00
Fund balance.....		2,000.00
To record sale of bonds at 101.....		
	<i>July 31, 1948</i>	
Appropriations.....	\$ 29,000.00	
Encumbrances.....		\$ 29,000.00
To record charge to appropriation account for portion of contract completed.....		
	<i>July 31, 1948</i>	
Contract for construction.....	\$ 29,000.00	
Cash for construction.....		\$ 26,100.00
Retained percentage on contract.....		2,900.00
To record payment on work completed.....		
	<i>July 31, 1948</i>	
Due to General Fund.....	\$ 25,000.00	
Cash for construction.....		\$ 25,000.00
To record repayment of loan from General Fund.....		

The Accounting Review

November 1, 1948		
Cash for bonds and interest.....	\$ 4,333.33	
Cash for construction.....	254,800.00	
Fund Balance.....	5,200.00	
Bonds authorized.....		\$260,000.00
Accrued interest payable.....		4,333.33
To record sale of bonds at 98 and accrued interest.		

August 1, 1948 to December 31, 1948		
(1)		
Appropriations.....	\$316,000.00	
Encumbrances.....		\$316,000.00
To record charge to appropriations account for portion of contract completed.		
(2)		
Contract for construction.....	\$316,000.00	
Cash for construction.....		\$284,400.00
Retained percentage on contract.....		31,600.00
Payment on work completed.		
(3)		
Appropriation.....	\$ 4,210.00	
Cash for construction.....		\$ 4,210.00
Administration costs.....		
(4)		
Cash for bonds and interest.....	\$ 2,300.00	
City's share of improvement cost.....		\$ 2,300.00
Collection on account.....		
(5)		
Bond Interest.....	\$ 4,866.67	
Accrued interest payable.....	4,333.33	
Cash for bonds and interest.....		\$ 9,200.00
To record payment of bond interest.		

Trial Balance		
	Dr.	Cr.
Bonds Payable.....		\$460,000.00
Assessments receivable.....	\$415,000.00	
City's share of improvement cost.....	43,700.00	
Appropriations.....		98,090.00
Encumbrances.....	75,000.00	
Contract for construction.....		75,000.00
Cash for construction.....	128,390.00	
Fund Balance.....	3,200.00	
Retained percentage on contract.....		34,500.00
Cash for bonds and interest.....		2,566.67
Bond Interest.....	4,866.67	
	<u>\$670,156.67</u>	<u>\$670,156.67</u>

CITY OF PATWRAY
Special Assessment Fund
Balance Sheet—Dec. 31, 1948

Assets		
Cash:		
For construction.....	\$128,390.00	
Less overdraft of cash for bonds and interest.....	2,566.67	\$125,823.33
Assessments receivable.....		415,000.00
City's share of improvement cost.....		43,700.00
Fund balance.....		8,066.67
		<u>\$592,590.00</u>
Liabilities		
Bonds Payable.....		\$460,000.00
Retained percentage on construction contract.....		34,500.00
Contract for construction.....		75,000.00
Appropriations		
Balance.....	\$ 98,090.00	
Less encumbrances.....	75,000.00	23,090.00
		<u>\$592,590.00</u>

ASSOCIATION NOTES

E. BURL AUSTIN

TERRITORY OF HAWAII

University of Hawaii:

By recent act of the Territorial Legislature, a College of Business Administration has been established at the University of Hawaii.

KATHLEEN PIERSON has been added to the staff as instructor in accounting.

ALABAMA

University of Alabama:

S. PAUL GARNER now heads the accounting department, succeeding C. H. KNIGHT, who passed away in June.

New appointments include R. H. VAN VOORHIS as associate professor and JOSEPH E. LANE as assistant professor.

HAROLD COLE recently resigned from the staff.

S. PAUL GARNER was recently elected secretary-treasurer of the Alabama Society of CPA's.

CALIFORNIA

University of California:

Visiting professors for the summer session included GEORGE R. HUSBAND of Wayne University, and CARL L. NELSON of the University of Minnesota.

Recent departures from the staff included: LEONARD CHADWICK to go to San Diego State College; WILLIAM F. JACKSON to Humboldt State College, and GEORGE P. FRANKS to St. Mary's College.

Stanford University:

OSWALD NIELSEN recently addressed the Lumber Merchants Association of Northern California on practical application of costing techniques in the retail lumber industry.

J. HUGH JACKSON was recently elected international president of Kiwanis International and will be on sabbatical leave during 1949-50 to perform the duties of that office.

University of San Francisco:

JESSE REYNOLDS has been appointed assistant professor of accounting.

M. P. KILGORE recently addressed the first University Business Conference on the subject of cost control, and the San Francisco Retail Hardware Distributors on store operational costs. KILGORE recently passed the California CPA exam.

COLORADO

University of Colorado:

HERMAN I. ARENSON has been elected secretary of the Colorado Board of Accountancy.

University of Denver:

New appointments included: DALE FERREL as assistant professor and TOM HARRISON as instructor.

GEORGIA

Southeastern membership of American Accounting Association jointly sponsored with Southeastern College Accounting Instructors a conference held in Atlanta in April. Speakers included: JAMES S. LANHAM, HARVEY MEYER, L. E. CAMPBELL, WILLIAM H. WHITNEY, GEORGE E. MANNERS, ROBERT L. DIXON, PAUL THOMAS, L. P. MINGLEDORF, and W. C. LLEWELLEN.

Emory University:

E. R. BOLLINGER has accepted a position at Georgia Institute of Technology.

L. E. CAMPBELL has been re-elected secretary of the Georgia Society of CPA's and is program chairman of the Atlanta Chapter of the Institute of Internal Auditors.

IDAHO

University of Idaho:

FRED LATHAM has resigned to accept a position with a firm of Certified Public Accountants in Salt Lake City.

ILLINOIS

Roosevelt College:

ESTHER GREEN has been appointed assistant professor of accounting.

S. W. SPECTHRIE has been elected to the Board of Trustees of Roosevelt College.

Bradley University:

MICHAEL F. GRISAFE has been named head of the Accounting Department.

KANSAS

University of Wichita:

The accounting faculty at present includes WILLIAM F. CRUM, professor and head, ROBERT M. RYAN, WILLIAM TUXBURY, and FRANCIS JABARA, who are assistant professors.

KENTUCKY

University of Kentucky:

W. E. BEALS has returned from a year's leave of absence.

ROBERT D. HAUN addressed the spring meeting of the Kentucky Bar Association on the Revenue Act of 1948.

LOUISIANA

Louisiana State University:

LLOYD MORRISON has been appointed professor of accounting.

GEORGE A. GUSTAFSON has resigned to do graduate work at the University of Michigan.

Louisiana Polytechnic Institute:

The Institute recently sponsored jointly with the American Institute of Accountants and the Louisiana Society a graduate study conference for CPA's. Teachers of accounting who participated in the conference were: LEO HERBERT of Louisiana Polytechnic Institute, B. F. HARRISON of Oklahoma A. & M., JAMES T. JOHNSON of Louisiana Tech, PAUL BURNAM of Southwest Louisiana Institute, STEVE VASQUEZ of Loyola University, and MARION BARNETT of Centenary College.

MISSISSIPPI

University of Mississippi:

R. L. KANE has resigned to become educational director for the American Institute of Accountants.

IRVING K. CHRISTENSON has been added to the staff as associate professor.

MISSOURI

University of Missouri:

PAUL A. KOHLER is on leave of absence for graduate study at the University of Iowa.

Newly appointed instructors are: WOODHAM W. CAULEY, PAUL A. GROSCH, RICHARD I. ICHORD, EDGAR R. SELF, and GLEN W. VANTREASE.

L. J. BENNINGER was recently appointed associate professor of accounting.

NEW YORK

Clarkson College:

WILLIAM D. KREBS was recently elected president of the Adirondack Chapter of the Empire State Association of Public Accountants.

University of Buffalo:

RUFUS WIXON has resigned as head of the Department of Accounting to become professor of

accounting at Wharton School of Finance, University of Pennsylvania. WIXON recently presented a paper on common dollar accounting at the annual alumni conference of the University of Michigan.

JAMES S. SCHINDLER has resigned to accept appointment at Washington University in St. Louis. Other resignations include: J. HUGH JACKSON, JR., to go to San Jose State College and GEORGE STAUBUS to do graduate work at the University of Chicago.

New appointments include: JOHN P. POWELSON as assistant professor and COLIN I. PARK as lecturer.

OHIO

Western Reserve University:

ROBERT R. LOVE has resigned to accept a position at Tennessee Polytechnic Institute.

Added to the accounting staff are: A. L. SHUGERMAN as assistant professor and CHAUNCEY M. BEAGLE as instructor.

University of Akron:

DENNIS GORDON has been promoted to associate professor. GORDON recently participated in three radio programs sponsored by NACA.

Ohio State University:

The local chapter of Beta Alpha Psi, national honorary professional accounting fraternity, recently initiated as honorary members the presidents of the five major national accounting organizations as follows: PERCIVAL BRUNDAGE of the American Institute of Accountants; CLINTON W. BENNETT of the National Association of Cost Accountants; ARTHUR CHILD of the Institute of Internal Auditors; ROBERT L. DIXON of the American Accounting Association, and KELLEY Y. SIDDALL of the Controllers Institute of America.

OKLAHOMA

Oklahoma Agricultural and Mechanical College:

J. RICHARD VANDEGRIFT has been promoted to associate professor.

B. F. HARRISON served as discussion leader at the recent graduate study conference for CPA's held at Louisiana Polytechnic Institute.

TEXAS

North Texas State College:

DONALD R. CHILDRESS will be on leave for the coming year to do graduate study at the University of Pennsylvania.

VIRGINIA

University of Richmond:

SAMUEL H. BAKER has been appointed a member of the Virginia Board of Accountancy.

E. E. FORD led a panel discussion at the annual meeting of the Virginia Society on the subject

of attitudes of personnel toward public accounting.

WISCONSIN

University of Wisconsin:

J. ARTHUR LEER and DONALD J. WISSBAUM have recently been awarded CPA certificates.

THE ENTITY THEORY OF CONSOLIDATED STATEMENTS

Monograph No. 4

By

MAURICE MOONITZ

Contents: Institutional Background, Basic Premises, The Area of Consolidation, Elimination of Intercompany Transactions, Intercompany Investments and Other Assets, Outside Interests, Consolidated Surplus, Summary and Conclusions

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School of Business—University of Chicago

CHICAGO 37, ILLINOIS

BOOK REVIEWS

CHARLES J. GAA

Advanced Accounting. Arnold W. Johnson. (New York: Rinehart & Company, Inc., 1948, Pp. x, 499. \$5.)

Advanced Accounting is the third book of a three-volume coordinated series of texts for intensive courses in accounting on the collegiate level. It follows the author's *Elementary Accounting* and *Intermediate Accounting*, and its organization and content have been dictated by the same objectives that governed the preparation of the first two books. These objectives are rooted in the fundamentals of "valuation accounting" and accounting theory; and, to achieve them satisfactorily, the author has recognized the importance of having a sufficient supply of problems (p. v).

Professor Johnson's text is an orthodox and satisfactory presentation of those subjects which are usually included in the advanced accounting course. The author discusses Partnerships, Joint Ventures, Home Office and Branch Accounting, Consolidated Balance Sheets, Consolidated Profit and Loss and Surplus Statements, Foreign Branches and Subsidiaries, Consolidations and Mergers, Statements for Financing and Capital Readjustments, Statement of Affairs, Receivership Accounting, Statement of Realization and Liquidation, and Accounting for Estates and Trusts, in the order named.

Illustrative problems are used generously and effectively to explain procedures, and there is an excellent and adequate supply of problems with each chapter for home assignments. "Acknowledgment is due the American Institute of Accountants for the use of certain problems (marked with an asterisk in this text)" (p. v). The omission of questions on theory and of short problems is not a serious omission, in the opinion of the reviewer at least.

Professor Johnson has taken particular care in preparing the material on consolidated financial statements (p. v). The cost method, the actual or book value method, and the reconciliation of one to the other are fully explained. Preparation of consolidated statements from either basis is fully explained; this is necessary, of course, because both methods and variations of each are used in practice. In summary, however, the author expresses his preference for the cost method.

"The 'actual-value' method of investment accounting, however, is of questionable propriety. Accountants who have given it support have done so on the premise that the profits of the subsidiary company are fundamentally the profits of the controlling corporation; and that since the success or lack of success of the subsidiary correspondingly increases or decreases the value of the investment in the subsidiary, the parent corporation is justified in correspondingly adjusting upward and downward the value of its investment in the subsidiary.

"It should be pointed out, however, that parent and subsidiary corporations are separate legal entities; and that since separate books are kept for each such entity,

it is natural and logical that sound and accepted rules of valuation accounting should be utilized uniformly in each set of accounts. To write up the Investment account for the purpose of reflecting the parent corporation's share of undistributed subsidiary profits is a procedure directly contrary to the fundamental and conservative accounting rule of recording assets on the books at cost; and of recording only realized income for a business entity. Capitalizing the profits of a subsidiary on the books of the controlling corporation is questionable appreciation accounting. It results also in a misleading balance for the Investment account; the balance is not cost but a hybrid value produced by utilizing two unlike principles of accounting for the valuation of a single asset.

"The recording of undistributed subsidiary profits by crediting Income from Subsidiary Companies, or Earned Surplus, is also subject to challenge. It is factually indisputable that credits of this character are not matched by assets legally received by the controlling corporation. In so far as the holding company is legally concerned, the credits are *unrealized* because no assets have been acquired. This argument receives special force if income is recognized only when, and as, evidenced by the receipt of current assets. The holding company has received no such assets.

"The holding company, of course, does have an interest in the undistributed profits of a subsidiary corporation; but the property of the subsidiary—in which these undistributed earnings are contained—is exclusively the property of the subsidiary until profits are legally made distributable through the declaration of dividends and a creditor claim for dividends is created. In the meantime, this property is actually and directly the property of the subsidiary corporation and only indirectly the property of the controlling corporation. Sound accounting should always reflect realities.

"It should be equally clear that, if the holding company takes up its share of the undistributed profits of a subsidiary, the credit member of the entry does not become 'realized income' merely by the mechanics of a bookkeeping entry. Furthermore, this credit is not realized income in the sense that it is a surplus legally distributable from realized assets under the *direct* possession and control of the parent corporation. The surplus could be distributed by the controlling corporation only to the extent that it had been evidenced by the actual receipt of dividends. Of course, the argument may be raised that the reasoning in this paragraph might be circumvented by crediting the undistributed subsidiary profits to a special surplus account such as, for instance, 'Earned Nondistributable Surplus of Subsidiary Company XYZ.' But such account titles not only have the drawbacks of being mystifying and confusing; they are artificial, unserviceable, and statistically unnecessary.

"It may be observed further that, with reference to the controlling corporation, there is no real benefit to be gained by the process of recording annually in the stock investment account the proportionate interest of the company in the profits and losses of the subsidiary for the year. This practice is contrary to accepted sound principles of accounting for investments in securities. It also complicates investment values and unconsolidated financial statements incorporating such hybrid valuations for stock investments.

"Of course, if the controlling corporation is convinced that the value of its investment in a subsidiary corporation is impaired permanently, the propriety of reducing the book value of the investment could hardly be questioned. This reduction should take the form of a valuation reserve created by a special debit to Profit and Loss.

"It is probable that the cost method of accounting for stock investments is used most generally in practice. Because of its general usage and, also, because it accords with the principles of sound valuation accounting, the 'cost method' of accounting for controlling stock investments should be recommended for continued and expanded use."

Insofar as the *separate* financial statements of the parent company are concerned, the investment in the subsidiary company should appear at cost. A footnote of the balance sheet may be used to disclose the parent company's share of the net increase or decrease in the surplus of the subsidiary company since date of acquisition. Similarly, a footnote on the profit and loss statement may be used to disclose the parent company's share of the undistributed net income of the subsidiary company for the same period.

A typographical error, in heavy print and probably the only one in the text, produces the word ACCONUTING (p. 3). The reviewer hopes that this does not get into the hands of the wrong people. To illustrate, a scornful ECONMISTO may call us ACCONUTS.

HARRY H. WADE

University of Iowa

Intermediate Accounting. Wilbert E. Karrenbrock and Harry Simons. (Cincinnati: South-Western Publishing Company, 1949. Pp. v, 597. \$4.50)

This excellent new text is intended for students who have completed a year of about 6 semester hours, or 9 or 10 term hours, of accounting fundamentals. A new *Advanced Accounting* is to follow, the two together covering a second year of college accounting of say 10 semester or 15 term hours. The two volumes are an extensive revision, improvement and up-dating of the same authors' single volume *Advanced Accounting* of 1941.

The book starts by quoting the opinion paragraph of the standard short form auditor's report or "certificate," "In our opinion the accompanying statements present fairly the position of the Company at . . . , and the results of its operations for the year . . . , in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year." The significance of the phrase "generally ac-

cepted accounting principles" is then developed; and the authors proceed to set forth those principles as currently interpreted, with frequent attention to recent pronouncements of the American Institute of Accountants. Students familiar with this text will not have to be warned or re-educated in more advanced courses, particularly auditing, as to controversial issues in which modern practice differs from the conclusions of earlier texts. For this reason as well as for its other merits, the book will demand attention in a field where the dominant text material is somewhat obsolete.

The plan of the book is orthodox. Three introductory chapters review fundamental processes: statements, journals and ledgers, and the work sheet. Then current assets are taken up in turn, followed by "noncurrent" assets—fixed, intangible, and deferred charges, and then by liabilities and corporate proprietorship. The final section is on "analytical processes" dealing with correction of errors, single-entry and incomplete data, and statement analysis, with concluding chapters on the statement of application of funds and a short review of cost accounting. Presumably the second volume, to follow, will take up insolvency, consolidations and such additional material common to advanced texts.

While this is a "balance-sheet approach," cost-and-revenue adherents will not necessarily be disappointed. The operating statements and aspects are everywhere emphasized.

Especially noteworthy is the attention paid to income-tax effects, as well as sales, payroll and withholding taxes, and other new developments. Other improvements include the attention to combined income and surplus statements, the handling of reversing entries, the entries for notes receivable discounted on both sets of books, an exposition of LIFO and FIFO inventory costing, the retail method, and work-in-process costing (avoiding common errors), and various depreciation methods. Illustrations, questions and problems are clear and to the point and offer adequate variety. The student who can be persuaded to give reasonable attention to the text can get the picture there and get it straight, leaving the instructor free in the classroom for discussion and amplification.

Inevitably a reviewer will find something to criticize, even in a book as good as this. Some will object to crediting gifts to "paid-in" instead of "donated" surplus (p. 10); to a perhaps inadequate effort to get away from the ambiguous term "reserve;" to the accent on correcting erroneous past depreciation estimates (though this reviewer is in accord with the author here); or to the separation of deferred charges and prepaid expenses from current assets (contrary to the Institute's ARB 30). These are not of great consequence, and the authors are generally careful to point out the alternatives.

There is an excellent appendix of representative published statements, and an adequate index, but no bibliography. Perhaps inclusion of the text of pertinent bulletins and statements of the Institute and the Association would have been worthwhile, but they do not appear. There are practically no footnote references to authorities. The book is attractive and well put to-

gether, although the particular copy reviewed had some paper defects. Objective achievement tests, instructor's manual and solutions to problems are available at no charge.

ARTHUR M. CANNON

University of Washington

Cost Accounting. (Third Edition). Charles Reitel and Gould L. Harris. (Scranton: International Textbook Company, 1948. Pp. xii, 692. \$5.50.)

This is a substantially enlarged third edition of the senior author's text which was first published in 1933 and was issued in a revision by C. E. Johnston in 1937. The extent of the augmentation may be seen in the fact that the number of chapters has been increased from 28 in the second to 40 in the third edition and the number of pages from 425 to 692. New chapters include discussions of "cost summary statements," "general accounting or non-cost systems," "cost units and unit costs," "sound organization the basis for effective control," "departmentalization," "taking inventory" and "profit planning." The revision has introduced a heavy emphasis in the sections revised upon actual practices of particular companies, individual cases being frequently cited. The revision is also characterized by very frequent references to statements or papers by men prominent in accounting practice or literature. This tendency was so pronounced that this reviewer as a matter of curiosity counted the number of such references in one chapter of 17 pages (No. XX on inventory valuation and control) and found 23 mentions of other writers' names—seven each of C. B. Nickerson and S. J. Broad, six of E. A. Krache, two of W. R. Donaldson and one of R. B. Kester. This inclination to reproduce themes developed by others gives the book something of the character of a cost accounting manual and should increase its usefulness to those who use it primarily as a reference book, but tends to a more uneven development of the subject than might be desired for classroom use in the typical cost accounting course. It is interesting to note that other works of the senior author are referred to in the same way, i.e., "Charles Reitel makes the following statement . . ." (p. 501).

New topics emphasized by the authors in their preface include profit to volume ratios and P/V charts and controls for repetitive maintenance, standards for overhauling costs, and budgets for major repairs. As noted above, a chapter (No. XXXIX) is devoted to profit planning and describes the P/V chart. The reviewer believes that this type of application of cost accounting data is needed in cost accounting texts and courses, but it needs to be presented with an exposition of its limitations which requires more statistical sophistication than is usually brought to the subject by accountants. Both the P/V chart and a chart used in developing standards for direct labor costs presented in Ch. XXV of the text develop lines representing functions assumed to be linear, and the P/V chart involves an extrapolation of the line. The assumption is open to doubt. Perhaps it is improper to insist upon such considerations when the mere exposition of the technique represents a commendable progressiveness. The new material on budget-

ing and control of maintenance and extraordinary repairs is valuable but hardly seems important enough to justify the authors' statement that "No other procedure set forth in this text has greater importance than this one covering the setting of standards and control of maintenance and repairs."

The general organization of the text is not changed from the second edition. The authors have introduced the subject with discussions of the services of cost accounting and have taken up details of cost accounting procedures and controls before developing the general ledger techniques of job order and process costs. The third edition is superior to the second in the opinion of this writer in giving a somewhat better picture of the whole cost accounting process at an early stage (in a chapter on cost controlling accounts—No. VI). It does not take up process systems until page 412, however, and job order systems are taken up as a special subject on page 441. If cost accounting texts are divided into two groups—those which place details first and those which present the general scheme of accounts first—the text under review would have to be placed in the former group, since its emphasis is in that direction. Apparently the arrangement is a matter for individual pedagogical judgment.

Preoccupation with managerial control through cost accounts is a consistent characteristic of the book. The problem book provided for the text evidently has been revised to a relatively slight degree, new material being added to cover new material in the text, references to the text in the problems formerly used being changed to the new numbers, and most of the problems formerly published being repeated with few or no changes. The reader will find that the authors occasionally make statements which they would be hard pressed to prove, as for example the following one taken from their discussion of standard cost technique: "However, since the amount of labor variances cannot be known before the standard labor cost is calculated, it is usual tentatively to consider all actual direct labor cost as a variance and to record it as follows:

Direct Labor Variance	\$ x x x x	\$ x x x x"
Payroll		

However, it is a rare author who never finds himself in such a position on an isolated point and it should not be permitted to obscure the many worthwhile features of the book.

LAWRENCE L. VANCE

University of California

Company Annual Reports. Thomas H. Sanders. (Boston: Harvard Business School. 1949. Pp. xiii, 338. \$3.75.)

This is a timely survey of current practice in corporate reporting. Anyone who has made even a casual examination of corporate annual reports is aware of the great changes that have taken place in the form, content and purpose of these instruments of information. These changes are but particular evidence of the increasing and wide interest in the general problem of "human relations," to which business has increasingly addressed itself under the title of "Industrial and Public Relations." The problems of the annual report effectively focus the responsibility of business leadership in relation

to particular groups at interest, as well as society generally. Thus the importance of the annual report as an object of study.

This book undertakes a wide survey of present practice in corporate reporting and of interested opinion as to what this practice should be. Considerable evidence has been gathered, via questionnaires, report study, interviews and other sources, as to current practice and opinion thereon from management, investment analysts, employees, labor union representatives and shareholders. As might be expected, a wide range of practice, opinion and attitude is recorded. The author's purpose is not only to observe the facts but to endeavor to compose the diverse and conflicting views into a somewhat harmonious picture. "The main thing attempted is a digest of the evidence for the purpose of pointing the way to its practical significance with respect to desirable policies, and of establishing sound general points of view on the problem."

The jacket plainly outlines the structure and content of the book as follows:

Part I contains a condensed statement of the aims and problems of the annual report and the author's views of them. Included are the president's section of the report, and use of pictorial and statistical material.

Part II assembles and summarizes the views and efforts of different groups interested in the annual report. Replies to questionnaires sent by the author to company managements and investment analysts are summarized and quoted, as well as replies to questionnaires sent by seven corporations to their stockholders. The reactions of security analysts and employees to company questionnaires are reported, as well as criticisms of labor unions.

Part III offers a statistical summary of accounting trends in annual reports over a period of 15 years, with particular emphasis on balance sheet, income statement, and income and surplus items.

The author recognizes the immediate end of the report as an account of stewardship to owners; the final end is to assist in effecting a mutuality of interest—an indispensable factor in coordination—among all individuals and groups at interest. There are no particular formulae of form and content by which this final end is to be achieved, other than the general: clear, honest, sincere and attractive reporting. Evidently the integrity of financial and statistical data is the first prerequisite of a good report. The many problems encountered in the preparation of the annual report (from "To Whom the Report is Addressed" to "Pictures") are systematically and objectively considered, demonstrating clearly enough that there are no routine answers. The task requires the highest type of creative planning on the part of business leadership.

As the author suggests, the contents of the book will not be of equal interest to all readers. Part I, which carries the principal burden, will be of general interest, as well as the introductory and concluding sections of later chapters. However, many will find the detailed data of Parts II and III very interesting and informative, providing for many, no doubt, (as for this re-

viewer) factual answers to previously conjectured questions. Of particular interest are the excerpts from letters from company officers (Chapter VI) expressing their attitudes and experience with reference to the annual report. These letters will be especially helpful to company officers seeking assistance in their report problems. The reporting of the results of company questionnaires on the annual report will also be helpful here. We are indebted to Prof. Sanders and the Harvard Business School for this timely and valuable study.

JOHN McMAHAN

Allegheny College

Accountants Reports. (Fourth Edition). William H. Bell. (New York: The Ronald Press Company, 1949. Pp. vii, 374, \$7.00.)

In this fourth edition of *Accountants Reports*, the author has written of what he feels is the most important branch of accountancy practice, the preparation of reports. This edition represents almost a complete revision, in many respects, of Mr. Bell's earlier works on the subject in an effort to reflect recent changes in report writing occasioned by the requirements of the Securities and Exchange Commission and the activities of the committees of the American Institute of Accountants.

The book is addressed not only to the public accountant but to the private accountant and the advanced student, and should prove to be of great practical benefit to anyone who prepares or makes use of accountants' reports.

A partial list of chapter headings, indicating the coverage of the volume, is as follows: Balance Sheets, Income and Surplus Statements, Consolidated Statements, Miscellaneous Statements, Presentations, Comments, Certificates, A Complete Audit Report, and Mechanical Features and Office Procedure.

The author has illustrated his book profusely with specimen forms, drawn from published statements and other sources, which do much to enhance the value of the text material. His procedure appears to have been to make certain comments of a more or less general nature under the respective chapter headings, giving due credit to recent bulletins issued by the Committee on Accounting Procedure of the American Institute of Accountants, followed by a great variety of specimen forms. In his attempt to illustrate many alternative procedures he has, in the opinion of this reviewer, left the reader somewhat breathless and ignorant of the writer's evaluation of the specimens presented.

The chapters on "Comments" in accountants' report writing represent an outstanding contribution to the literature on this subject. Particularly are Mr. Bell's paragraphs on the comments relating to financial condition generally and operations—as distinguished from specific balance sheet items—interesting, informative, and to the point.

The section of the book dealing with certificates which accompany accountants' reports presents the latest thinking on the date of publication as to the requirements to be followed by practitioners. Twenty-one certificates from recent published statements are presented principally, according to the author, to illustrate

unusual features. A study of their contents reveals that so long as there are two accountants in the world there probably will be at least two different opinions as to the treatment of certain controversial items, such as the creation of reserves for excessive construction costs.

Mr. Bell has included a very interesting complete audit report which is unusual in two respects. The complete report contains detailed information on operations far beyond that ordinarily found in audit reports and might well serve as an excellent example of this type of report writing. It contains no certificate, however, which the author explains by stating that inasmuch as the report is intended solely for use by the officers of the company a certificate is not called for. In the reviewer's practice it has been found desirable to render an opinion or a "lack of one" on each report regardless of its intended use, on the theory that he who reads, regardless of who he may be, will have no cause for doubt as to the scope of the examination or the degree of responsibility attached to the statements by the independent C.P.A.

Accountants' Reports, fourth edition, should prove an invaluable reference tool for the practitioner, public or private, and the advanced student who wishes to write clear, concise and informative reports.

GEORGE S. OLIVE, JR.

Indianapolis, Indiana

Consolidated Statements. George Hillis Newlove. (New York: D. C. Heath and Company. 1948. Pp. x, 402. \$7.00.)

Professor Newlove, long acknowledged an authority on consolidated statements, has written not only a good textbook, but also a valuable reference work for Public Accountants and teachers of accounting.

The material on consolidated statements is covered in much more detail than that available anywhere else. Unusual situations not mentioned in most textbooks are discussed adequately. The material is abundant in illustrations, and, in this reviewer's opinion, is suitable for a course at the graduate level; even at this level parts of the material will give the brightest student a substantial mental challenge. Some preparatory work on consolidations, such as that covered in textbooks on advanced accounting, will be needed in most cases before the student can do justice to this book.

Public accountants will find the book useful for reference purposes, since difficult situations encountered in practice are illustrated and discussed, and the material is well documented with references to the rulings of the Securities and Exchange Commission, the New York Stock Exchange, and the Bureau of Internal Revenue.

The text is comprised of 10 chapters, some of which are quite long. Chapter 1 on Corporate Combinations includes some legal aspects of consolidations and the accounting problems preceding the consolidation, and begins a rather comprehensive discussion of goodwill which is continued in several later chapters.

Chapter 2 is entitled Holding Company Accounting, and like Chapter 1 is rather general in nature, covering some of the pre-consolidation accounting problems and

rules of the different regulatory groups. Here is introduced the "equity ratio method" (a variation of the actual cost method) of making "eliminations" and computing majority and minority interests.

Most of the content of Chapter 3, Consolidated Balance Sheets at Date of Acquisition, is devoted to the problem of "eliminations," and covers briefly intercompany accounts payable, intercompany bonds, profits in inventories and fixed assets. A good discussion of the "Debit Differential" (goodwill) is started in this chapter. Professor Newlove states: "... American Institute problems involving oil wells (1933) and coal lands (1937) emphasized that the debit differential might well undergo amortization," (p. 51). A similar discussion of the "Credit Differential" (negative goodwill) follows. This reviewer believes that both of these discussions might have been expanded to advantage.

In Chapter 4, Consolidated Balance Sheets after Changes in Subsidiary Net Worth, work sheets are illustrated and discussed, Professor Newlove expressing preference for the vertical type of work sheet when numerous companies are involved in the consolidation. A rather long and good discussion of stock dividends is included in this chapter.

Chapter 5, Changes in Degree of Ownership, contains an adequate discussion of treasury stock in consolidations, and the most complete discussion that the reviewer has seen of problems relating to stock rights. This follows a discussion of methods of handling purchases of stock made after the original investment.

Chapter 6 is on Unilateral Subholding Companies: the "A holds in B, B holds in C" situation. The chief problem relating to unilateral holdings is the practical one of work sheet methodology. Professor Newlove mentions five methods that may be followed in making the eliminations and in determining the majority and minority interests. When few companies are involved he favors the method under which the "grandson" eliminations are made first, and any surplus not eliminated is transferred to the "son" and split between the inside and outside interests. When the number of companies involved is large, he favors the "equity ratio" method, under which a table of ratios is first computed for the consolidated balance sheet computations, thereby greatly reducing the amount of work required on the work sheet.

In Chapter 7, No-Par and Preferred Stock, the problems arising from preferred stock holdings are thoroughly discussed.

Chapters 8 and 9 deal chiefly with work sheet methods of handling income and surplus problems, including "father," "son," and "grandson" relationships.

Chapter 10 deals with bilateral (reciprocal) stockholdings. Various methods are given of treating the problems that relate to such stockholdings. Professor Newlove states: "The accounting for bilateral groups should depend upon the size of the reverse stockholding and upon the size of the minority of the company owning the reverse holding," (p. 328). He presents with illustrations five different methods of treating such holdings, including treasury stock methods both with and without goodwill.

The book contains 47 class exercises and 39 problems. A sampling of these indicates that they provide adequate supplementary material for a 3 or 4 credit semester course. A teacher's key is available.

The author does not attempt to develop a theory of consolidations as Moonitz has done, although there is a considerable amount of theory in the book. He treats problems that arise in the preparation of consolidated statements, discusses these problems, and illustrates what he considers are the best methods of meeting them. Probably the outstanding feature of the book is the extensive explanation and treatment of the "equity ratio" method. Much of the material is original and can be obtained from no other source.

The book is lithographed, and this has resulted in a few weaknesses. A few parts of the book would undoubtedly have been written a little more smoothly and the organization improved if Professor Newlove had had the opportunity to revise galley and page proofs. The small print bothered the reviewer at first, but he soon became used to it. These criticisms are minor in nature; the value of a book of this type is in the material, and not in the niceties of rhetoric and printing.

In this reviewer's opinion, Professor Newlove has made a valuable contribution to the literature on consolidated statements.

DONALD H. MACKENZIE

University of Washington

A Procedural Study of Accounts Payable Methods. [New York: Controllers' Congress, National Retail Dry Goods Assn., 1949. Pp. 24. \$2.50 (\$1.50 to members)].

This first in a series of procedural studies to be undertaken by the Controllers' Congress presents an analysis of a survey of the accounts payable procedures of 231 stores which responded to a detailed questionnaire. The study includes an analysis by type of store and sales volume, as well as a summary for all stores.

The classes of stores, sales volume, and number of reporting stores in each category were:

1. Department Stores with Annual Sales volume of:

(a) Under one million	6
(b) One to five million	64
(c) Five to ten million	36
(d) Over ten million	78

184

2. Specialty stores with annual sales volume of:

(a) One to five million	28
(b) Over five million	12

40

3. Chain specialty and variety stores with annual sales volume of over one million:

7

Total stores reporting 231

Forty-nine questions (some with several subparts) and their answers were analyzed under the following subject headings:

- I—The Purchase Order
- II—Order Checking

III—Invoice and Marking

IV—Payment of Invoices

V—The Terms File

VI—Returns to Vendors

The purpose of the study was to provide an individual store with a means for comparing its methods with those of others. A general conclusion drawn was that management is now placing more stress on control than it did in the recent period of shortages in merchandise and personnel.

CHARLES J. GAA

University of Illinois

The Regulation of Industry. Dudley F. Pegrum. (Chicago: Richard D. Irwin, Inc., 1949. Pp. x, 497. \$4.75.)

Professor Pegrum has done a real service in providing a book in the field of government and business (it is far too deficient in economic analysis to be considered a study in competition and monopoly) in which public policy is emphasized. Public policy questions require a determination of ends, and the focus of Pegrum's regulatory system is the individual person and his human personality. It is the function of the institutional arrangements to further the development of these. But, authoritarian government engaging in national economic planning of the socialist (or state capitalism) variety is, according to Pegrum, the very antithesis of the political and economic freedom necessary to the desired end. The competitive model can best perform this function. This, Pegrum admits, smacks of the philosophy of laissez-faire, which *philosophy* he expressly embraces. The *institutional* aspect of laissez-faire, carried into a technologically different society, he rejects, asserting that it cannot serve as a means to achieve the development of the individual to which, on the philosophic side, laissez-faire was devoted. These two aspects (institutional and philosophic) must be distinguished and only the inappropriate be discarded. After all this, it would be surprising indeed if the legal arrangements advocated by Professor Pegrum were not devoted to maintaining competition—specifically, the revision and more effective administration of all anti-trust and related legislation.

There has emerged, with the development of large scale enterprise (induced by manifold technological developments), an economy in which there is diffused a substantial amount of monopoly power. In the pricing of most products or services, pricing policies, such as price discrimination, geographical prices, price inflexibility, and non-price discrimination, can and have emerged. Pegrum's views on these matters are far less critical than some, however. Combination by integration and agreement has also meant a progressive eliminating of competition. Continuation of these things to the point of extinction of competition is not inevitable, however, if we develop a public policy (1) which recognizes combination as one phase of the evolving pattern of industry, (2) which is a coherent and articulate program with regard to competition and monopoly, and (3) which formulates and implements means for combating contravening arrangements.

This program would be built about revised Sherman, Clayton, and Federal Trade Commission Acts. Other requirements are: a more positive regulation of integration and community of interest; revision of the patent system to encourage invention but not to serve as the basis for monopoly and non-competitive practices; narrowing of exceptions, though special cases do need special treatment; federal control of at least the large corporations; and attempts to establish free trade in the international markets. Administrative regulation is the only way to develop a flexible and consistent policy of maintaining competition. Thus the primary responsibility should be placed in the FTC, in spite of its past deficiencies. Pegrum believes that an anti-trust program can succeed but that the result will depend on the political atmosphere, the adequacy of the laws, technical conditions of industry (e.g., problems involving natural resources and overexpansion of agricultural capacity require special treatment), and finally the effectiveness of the administrative procedures.

Pegrum's elaboration of the relevant law and other institutional arrangements is quite excellent. His statement of the problems is standard but well done, and his emphasis on public policy is desirable. However, many will remain skeptical of Professor Pegrum's view. There is much to be desired in maintaining competition; however, the public policies suggested are not unassailable. For example: (1) Problems involved in determining the limits to corporate integration are not solved by shifting locus of decision-making to an administrative agency. (2) Limitations of size of corporations, compulsory licensing of patents, regulation of stock ownership, and government supervision of pricing policies would seem to differ little from some central planning board programs. (3) Though we might agree with Professor Pegrum that cartelization in international trade is incompatible with a policy of maintaining competition at home, and though we can agree that the great competitive power of American corporations stands as a constant threat to cartels if American firms are not allowed to be included in them, still, it is difficult to see just what we can do about it if other nations insist on cartelization. Forcing American firms to compete individually with foreign state cartels so we can be consistent in our domestic program and in our advocacy of freer trade and can appear virtuous just does not seem practical. (4) Businessmen must "accept responsibility and assume leadership in developing solutions to grave economic problems and social injustice." Still cooperative efforts of businessmen to deal with real problems, such as excess capacity, are forbidden by the anti-trust laws.

The problems of maintaining competition in a non-competitive world are thus no less complicated than those of planning in an unplanned world.

JEROME SCHWEIR

Saint Louis University

Business Organization and Management. Revised edition. Elmore Petersen and E. Grosvenor Plowman. (Chicago: Richard D. Irwin, Inc., 1948. Pp. xi, 536. \$5.00.)

This book is a revised edition of the very successful work originally published in 1941. It has been rather completely reorganized and rewritten to add a certain amount of new material and bring to its pages considerable improvement in respect to the philosophy of business organization and management and the real motives which control the organization of modern business. As the authors have pointed out, the book is designed to be "a definite treatment of the principles of organization and management that are the energizing elements of all types of business, large or small, and wherever managerial leadership is required." The book is true to this objective and strikes this reviewer as being clear, accurate, and realistic in its treatment of a subject which a student could hardly be expected otherwise to comprehend short of a decade of experience in business management.

Under the new arrangement of the book, the authors have condensed in the first chapter a historical section outlining the major developments in business management from ancient times. The following two chapters deal with the human element in organization and management, with emphasis on the principles of authority, responsibility, and accountability which are appropriately regarded as the basic foundations of business organization.

Following upon this introductory material, the authors devote the next four chapters to an analysis of the "levels theory of organization," with chapters devoted to the board-of-directors level of management, the executive level of management, and the supervisory level of management. From this point, the book moves to a section of three chapters on departmentation, with able discussions of primary departmentation, the concept of functional departmentation, and the concepts of line and staff in their relationship to military, business, and other organizations.

At this point the authors have gone to the crux of modern business management with chapters on the centralization and decentralization of management, the formulation of management policy, efficiency in management, and the principles of incentive. Following these chapters are two relating to business management—"business association" management, and the problem of management in government-owned businesses. A final chapter discusses management as a career. In addition, each chapter carries a rather large number of provocative questions for discussion.

This reviewer finds the revised text book of Messrs. Petersen and Plowman a pleasing departure from many other attempts in this field which have been so largely devoted to descriptive material, the internal workings of the corporation, or corporation finance. While the book is hardly an exhaustive treatise on business organization and management principles, it is the clearest analysis, on a text book level, of the principles and manifestations of business organization and management which has come to this reviewer's attention. Especially pleasing is the emphasis on the human element in organization and management and the altogether too often overlooked quality of intellect required for executive leadership. College students (and others) are likely to

regard business leadership as a quality which requires only political astuteness, rather than the ability to deal intelligently with complex problems.

Not only do the authors give appropriate recognition to the human element and the requirements of executive leadership, but they have ably pointed out how organizational architecture develops from human limitations. These limitations account for the levels of management and they also explain in individual cases why management organization must vary so widely.

If one could offer adverse criticism of this excellent text book, it would be that the authors have not paid as much attention as they might have to the effect of business management on our economic system. This criticism is not regarded as particularly significant, however, since such a discussion might well have led them afield into portions of economic theory which would detract from the task to which they apparently addressed themselves. As an exposition of the basic principles of organization and management, in a form suitable for text book presentation, the book is excellent. Yet it achieves this success with interest, accuracy, and an appreciation for the facts of business life.

HAROLD D. KOONTZ

San Diego, California

Industrial Psychology and Its Social Foundations. Milton L. Blum. (New York: Harper & Brothers. 1949. Pp. xi, 518. \$4.50.)

Industrial Psychology and Its Social Foundations deals with some important phases of applied psychology which have aided greatly in the more effective operation of business firms. Although the title places this work in the field of psychology, actually it is a three-way combination which includes discussion of basic psychological principles, practical business situations, and appropriate emphasis on the frequently neglected human factor in business. For this reason Professor Blum's book should be of interest to students of business administration and management as well as to psychologists.

The major part of the book is concerned with various aspects of personnel and labor relations. A brief section, consisting of three chapters, surveys some psychological applications in other phases of economic life. One chapter treats consumer research, while two others take up advertising and salesmanship.

Professor Blum presents a good insight into the fields of job satisfaction and morale, two phases of the employer-employee relationship which have not been handled successfully on all occasions. The results of pertinent surveys in these fields are well summarized. In the chapter on incentives, a view which is somewhat at variance with the opinions of many managers is presented. Blum believes that "not only has the financial incentive plan been overdone, but in many cases the financial award has not even operated as an incentive." A convincing case for increased attention to non-financial incentives is presented.

In the chapter dealing with time and motion studies, the point is made that "the psychological components of time and motion study are very important, and have been overlooked frequently in their use." Further, the

author criticizes many of the practices of the "scientific management" school, and takes exception to some of the methods used by Frederick W. Taylor in his time study and rate-setting work. While many readers will not be in complete agreement with Blum's criticisms of scientific management, most will be in accord concerning the need for additional emphasis on human factors in setting labor standards.

Chapter 12, which treats the subject of accidents, contains an interesting set of comments on accident proneness. In the author's view, the concept of accident proneness is overrated and frequently improperly interpreted. Specifically, it is recommended that management determine what the distribution of accidents within the firm will be according to chance, and then work from chance expectancy in determining the extent of true accident proneness. This approach differs from the ordinary practice.

The use of psychological tests for assistance in the selection and placement of workers is discussed in two chapters. The testing field is, of course, the area in which psychology has made its greatest contribution to personnel administration, thus summarizing this topic in two chapters means much condensation. The author emphasizes, however, that testing devices must in large measure be tailor-made, and that proof of their worth must be obtained from experience over a period of time. The reader is adequately warned that "psychological testing should be approached with caution," and that "the greatest danger at the present time is the possibility of its being oversold." Clearly it is not now the complete solution to industry's selection problems.

One minor objection to the arrangement of material is the placing of the chapter on the Hawthorne Studies immediately after the introduction. These studies are important and practical contributions to the field of human relations and are deserving of attention. However, a greater appreciation of their significance would be obtained by the average reader after having read the chapters which establish a pattern of basic principles. Thus a place at the end of the section on personnel matters would seem to be more appropriate.

The outstanding feature of the book is its readability. Professor Blum writes in a smooth-flowing style that accommodates the reader. The book contains much factual material and quotes many authoritative studies, but there are numerous practical illustrations which keep it from being plodding and uninteresting. It is the kind of book that will be appreciated both by the student and by the business man.

THOMAS HANCOCK

University of Arkansas

Business Ideas Handbook. Editorial Staff. (New York: Prentice-Hall, Inc., 1949. Pp. viii, 666. \$7.50.)

No doubt the publishers knew what they were doing when they named the *Business Ideas Handbook*. But two other titles that might have been just as apt are "A Casebook of Yankee Ingenuity" or "985 Ways to Save Money in Business." At any rate, once the prospecting reader gets past the opening page and into this lode of

practical, useful, and proved business ideas, he is inclined to forget the title and fill his pack with the pre-planned nuggets that flash up at him from every page.

This is not a scholarly work, and it was not meant to be so. Nor is it an original work in the sense that it presents new ideas. It is, however, a very useful and handy compendium of ideas that have already been tried and proved to be profitable and workable. Its language is lucid, and its ideas are adaptable to many types and sizes of business.

Nothing was included in this profusely illustrated casebook of useful business ideas which would not (1) save time, (2) cut costs, or (3) increase employee satisfaction. The reader will find some ideas that are familiar and some which he will want to become familiar with. But if it is true that there are no new ideas but only combinations of old ideas, this handbook puts at the reader's fingertips the material for an almost astronomical amount of such combinations.

Conveniently divided into six parts, the book offers a selection of ideas for office management, accounting, advertising (including direct mail), sales management, credit and collection, and purchasing.

Of particular interest to accountants are the 124 pages devoted to accounting ideas. Short cuts and accuracy in figures, effective payroll records, time- and labor-saving ideas in accounting procedures, and speeding up reports for executive control each receive full-chapter treatment with forms, methods, and machines well illustrated.

There is something in this handy handbook for everybody who is in business. It should prove a wonderful sourcebook of ready-to-use ideas as well as a good starter for the busy businessman or executive who is looking for material upon which to build new ideas and methods.

EARL P. STRONG

University of Illinois

Money and Banking, Jay L. O'Hara. (New York: Pitman Publishing Corp., 1948. Pp. xx, 671. \$4.75.)

The development of Keynesian concepts and the national income approach have revolutionized economic thinking, but they have not as yet seriously modified the presentation in the texts. Part of the difficulty lies in the unsettled state of the new theory, part in the inability to reconcile the aggregate approach with the older market analysis. Finally, techniques have yet to be worked out for presenting the new analysis on an elementary level. A start has been made in the texts in the principles of economics. In the field of money and banking, Prof. A. G. Hart and Prof. Alvin H. Hansen recently have each given us new and stimulating treatments relating money, banking, fiscal policy, economic activity and programs for full employment.

The income analysis involves a considerable rearrangement of material, a much greater emphasis on monetary theory and a greatly condensed discussion of the institutions of money, banking, foreign exchange, etc. Prof. O'Hara's text is organized along conventional lines: Money, Commercial Banking, The Federal Reserve System, Foreign Exchange, The Value of Money,

Miscellaneous Financial Institutions, and Conclusions. Both approaches have their virtues and defects. A successful integration of them has yet to be made.

Judged according to the model he has chosen, Prof. O'Hara has prepared an excellent text. He has done extremely well in choosing essential topics and treating them simply. The writing, however, is often difficult and the vocabulary here and there unnecessarily learned (e.g. sequestration, mediated, devolves, etc.)

The organization of the material in a conventional text creates some serious problems in teaching. Divisions into money, commercial banking, etc. seem to be natural ones. They do lend themselves to an easier description of institutions and a simplified presentation of principles. Unless, however, there is carefully planned integration, the student is not likely to get a unified view of the subject. To some extent, with his introductory chapter and the chapter summaries, Prof. O'Hara has helped the student to see that unity. But he has not been able to overcome the departmental analysis of the conventional text.

We may cite a few examples to illustrate some of the teaching difficulties. Following the usual pattern, Prof. O'Hara first discusses money. He must then consider Federal Reserve Notes before he has taken up the Federal Reserve System. I always find it easier to teach the gold standard first and then the bimetallic, but Prof. O'Hara has given them in the usual historical order. The international aspects of the gold standard are briefly treated under the first section on money, but the student must wait almost 300 pages before he gets the background in foreign exchange to help him understand the international relationships of standards. Again, the expansion of bank credit is explained, with a helpful but inadequate summary of central banking, and before the Federal Reserve System has been presented. Prof. O'Hara tries to circumvent these difficulties by inserting briefly the background the student may need. Perhaps, money and banking does have to be taught twice to be learned once, but most of the difficulties arise from the basic arrangement of topics in the conventional treatment.

There are more serious objections. Prof. O'Hara, as in nearly all texts with this type of presentation, lumps investment banking, mortgage banking, insurance companies, etc. under the curious and wholly misrepresentative title of "miscellaneous" financial institutions. Some texts call them "other" financial institutions. Likewise, government revenue and expenditures and fiscal policy are treated either as an appendix to the financial system or are loosely integrated into the analysis. Prof. O'Hara does not avoid it. Finally, the discussion on the value of money and monetary theory is not clearly related to the institutional and analytical treatment of money and banking presented earlier in the text. Prof. O'Hara does try to bridge this gap in his chapter on stabilizing the value of money. These omissions and distortions occur because the conventional concept of money and banking just does not make room for them.

In spite of these criticisms, most of them of the type of analysis he has chosen, Prof. O'Hara's text is a very good one. His explanations of money and banking prin-

ciples are clear and easily followed. He is particularly successful with the sections on monetary theory. What was most commendable about the older approach, Prof. O'Hara accomplishes with distinction.

MENO LOUENSTEIN

Ohio State University

Introduction to Fiscal Policy. Richard M. Lindholm. (New York: Pitman Publishing Corp., 1948. Pp. xiii, 235. \$2.75.)

Mr. Lindholm's book is a discussion of the economic effects of taxation and public spending on economic activity. He directs his investigation to show how fiscal policies of balanced and unbalanced budgets can be used to improve the general welfare. He shows that all governmental fiscal activity in a capitalistic nation must take into consideration the probable effects on prices of goods and services, interest rates, and wage rates.

The text surveys the growth of governmental taxation and spending from World War I through World War II and the development of fiscal policies. He defines "full employment" in terms of employment of labor and assumes that other factors are also proportionally utilized. Investment in the private economy is defined as the purchase of new produced buildings, machines, inventories, and net foreign balance, while public investment is defined as of the same types as private investment, but may also include highways, public buildings, dams, and the like.

He discusses four goals of fiscal policy as the achievement of: (1) a desirable price relationship so as to encourage the production of desired goods; (2) a desirable level of consumption; (3) a desirable level of employment; and (4) a desirable distribution of income. He believes that the achievement of the four goals will result in a high and efficient level of utilization of resources.

The author then analyzes the general role of fiscal policy in achieving the four goals. He discusses the role of fiscal policy in price stability and the problems of eliminating inflation and deflation, and the effects of taxes on the price of particular goods. Both the general effects and the indirect effects of revenue-raising are examined, and he concludes that a flexible tax policy is necessary to control booms in consumption and investment.

He states that most of the progressive countries have replaced the old rule that the budget must be balanced annually with the new rule that "the budget must balance the economy." His analysis shows the way in which an unbalanced budget may be used to attain full employment, and the influence of taxation on investment expenditures and consumption expenditure. He advocates a tax upon idle funds to provide a stimulation of investment similar to a rise in interest rates, without the disadvantage of increased costs to borrowers. In discussing the fourth goal, that of the achievement of a desirable income distribution, he shows how the collection of revenues affects the income distribution of individuals, producer groups, and income types. He shows that fiscal policy can be used to achieve a more desirable distribution of income.

The last portion of the book is directed toward the

administration of government fiscal policy (Federal, state, and local) so as to attain the desired goals. He concludes that the experience gained during the thirties and World War II can guide in the administration of governmental fiscal policies along more desirable lines.

Mr. Lindholm's book is nontechnical and can be understood by undergraduate students and the layman. The author has made good use of data without great use of graphs and tables and has developed the more modern theories without mathematical formulae. Many readers may not agree with his conclusion or his suggested policies, but most readers will be stimulated by his discussion. Out of the fast growing literature on the subject of fiscal policy and economic welfare, it is one of the more readable books.

R. M. NOLEN

University of Illinois

Applied Economic Analysis. Francis M. Boddy, Editor. (New York: Pitman Publishing Corp., 1948. Pp. xiv, 572. \$3.75.)

The book is designed to serve as a text in economic problems after students have completed a course in economic principles and analysis. The authors have endeavored to show students how to use the tools of economic analysis in attacking economic problems. The text is divided into seven major sections or problems, with each author developing a section of the material. Professor Boddy wrote the first section, "The Controls of an Economic System," in which he discusses competition as a regulator of production, markets, prices, and other factors in our capitalistic economy. He shows the complicated problems arising from the interrelation of the effects that occur even in a simplified economic system operating under conditions of perfect competition. He analyzes the imperfections of realistic competition, monopoly, monopsony, monopolistic competition, and the dimensions of competition. He then discusses restraints to competition, the areas where competition is undesirable, and the problem of maintaining a workable competition.

In the second section, Professor Frank E. Childs discusses the "Economics of Labor." He analyzes the major labor problems of wages, unemployment, worker security, and substandard workers. He starts with the labor market and wage determination and then discusses working conditions, labor security, labor organization, collective bargaining, and public policy. The material on labor economics is well chosen and presented in a readable form. His analysis of union wage policies on prices and supply are especially good.

The third section, on the "Economics of Marketing," was written by Professor Wendell R. Smith. He discusses the function of marketing, the marketing institutions, brands, advertising, and price policies. It is a good condensation of the marketing process in our economy and gives an interesting discussion of market research, market analysis, and their limitations.

Professor G. H. Brownlee wrote the sections on "Money, Credit, and Monetary Policy" and "Public Finance and Fiscal Policy." He analyzes the demand for money in relation to the physical value of goods, inter-

est rates, and the general price level. He then discusses the relationship of money, the price level, employment, and capital formation. His graphs illustrating the relationship of monetary policy and employment are technical, but usable. He discusses briefly the gold standard (which he thinks will not be used widely again) and other monetary, credit, and banking controls. The discussions on "Public Finance and Fiscal Policy" are placed in a separate section, but are well integrated with the money and banking section. He analyzes the relationship of government expenditures and the equilibrium level of employment and prices. He then summarizes tax shifting and incidence and the effect of taxation on resource allocation and on the distribution of wealth. He advocates the integration of fiscal policy with monetary policy to aid in stabilizing the economy.

Section Six, "Agricultural Problems and the Conservation of Resources," was written by Professor Alvin E. Coons. He discusses the natural and human resources and their use in agricultural production. Then he outlines the development of agricultural and conservation policies and their relation to general welfare. He concludes his section with a short discussion on farm organization and the politics of agriculture.

Professor Virgil Salera wrote the section on "International Trade." He starts with the factual background of foreign trade, and then describes the mechanism of international exchange, including tariff policies and exchange controls. Then he discusses the international economic problems and the program for freeing world trade from uneconomical restrictions.

Although the text covers a sweep of economic problems, the material is carefully chosen and well integrated and achieves excellent balance. It should serve excellently as a text for applied economic analysis after the student has completed an introductory course in economics.

R. M. NOLEN

University of Illinois

Mutual Savings Banks in the Savings and Mortgage Market. John Lintner. (Boston: Harvard School of Business. 1948. Pp. xi, 559. \$6.50.)

It is as economists and university teachers of private finance that we must form our judgment in reviewing this book. That is unfortunate, because the book appears to be designed primarily for those persons who determine policy for mutual savings banks. Mr. Lintner's limited purpose thus restricts both the appeal of the book and the effectiveness of this review.

Mr. Lintner begins with evidence that, ever since the Civil War, more people have turned more of their savings over to specialized savings institutions for investment rather than investing the funds themselves. He then undertakes a detailed examination of the experience of mutual savings banks, as one of the important groups of savings institutions, *first*, as "institutions serving the thrift needs of the public" and, *second*, as institutions responsible for the productive investment of these funds.

In part one, he points out that there has been a persistent decline in the position of savings banks in the

savings market relative to other institutions such as the savings departments of commercial banks, savings and loan associations, and life insurance companies. He attempts to discover the reasons for this relative decline and to advise the executives of savings banks how they may improve their position. He appears, then, to be a special pleader for savings banks rather than one attempting to discover the appropriate role of savings banks in the savings market.

Mr. Lintner seems to prepare himself, for example, to make an examination of those factors which determine which thrift functions can best be served by life insurance and which can best be served by savings depositories, yet nowhere does he clearly do so. He turns instead to a discussion of savings bank life insurance and the benefits such insurance bestows upon the bank. Although he summarizes well the story of the origin of savings bank life insurance and accurately explains the reasons for the lower net cost of such life insurance to the policyholder, he draws no important conclusions therefrom. He emphasizes that the future of the savings bank system depends to a large degree on the improvement and expansion of the life insurance departments of the banks, yet both of the methods he recommends for achieving this goal involve higher costs of operation and consequent higher net costs of insurance. To the degree, therefore, that he accomplishes the salvation of savings banks and of savings bank life insurance, to the same degree does he destroy the one important distinguishing feature of savings bank life insurance.

In part two, he turns the coin over and examines the investment policies of mutual savings banks. As a result of the increasing flow of individual savings to these savings institutions, their investment policies are of considerable significance to the economy. The investment horizons of mutual savings banks are restricted geographically and by type of investment outlet. This constitutes a serious impediment to the competitive allocation of capital. This subject is not pursued by Mr. Lintner. In his introduction, he does recognize its importance when he states that the over-all business activity can be maintained if "firms and individuals are willing to undertake a sufficient volume of employment-creating capital expansions and are able and willing to obtain the necessary outside funds on the terms offered." He does not examine the interesting subject of what the effects would be if the new capital improvements were to be tailored to fit the terms offered. He also does not concede the alternative possibility that the investment horizons of the savings banks could be expanded to aid in the provision of venture capital. It may be unfair to criticize a book for what it does not contain, but our interest was aroused in the introduction and then gradually stifled in the more narrowly technical treatment that followed.

In his analysis of the investment practices of mutual savings banks in Massachusetts, Mr. Lintner has done a thorough job. For the general reader it is probably too thorough, but for those with a more specialized interest it should prove very helpful.

TRUMAN G. TRACY
ROBERT E. BRAY

University of Missouri

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